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TREASURY DEPARTMENT

Report of
THE DEPARTMENT OF THE TREASURY
on

Integration
of
The Individual and Corporate
Tax Systems

Taxing Business Income Once



January 1992

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DEPARTMENT OF THE TREASURY
WASHINGTON

ASSISTANT SECRETARY

January 1992

The Honorable Dan Rostenkowski
Chairman
Committee on Ways and Means
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Section 634 of Public Law 99-514, the Tax Reform Act of 1986 directed the Secretary of the Treasury or his delegate to study reforms of the taxation of corporate income under Subchapter C of the Internal Revenue Code. This mandate is quite broad. We concluded that a comprehensive study of the issues presented by integration of the corporate and individual income tax would address fundamental questions concerning how the corporate income tax might be restructured to reduce tax distortions of important corporate financial decisions and to achieve a more efficient system. Given the prevalence of integrated corporate income tax systems in the world today, we believe that an examination of these substantial issues should precede consideration of other, less fundamental, approaches to corporate income tax reform. Accordingly, this Report is submitted pursuant to the statutory directive cited above.

I am sending a similar letter to Representative Bill Archer.

Sincerely,

Kenneth W. Gideon
Assistant Secretary
(Tax Policy)



DEPARTMENT OF THE TREASURY
WASHINGTON

January 1992

ASSISTANT SECRETARY

The Honorable Lloyd Bentsen
Chairman
Committee on Finance
United States Senate
Washington, D.C. 20515

Dear Mr. Chairman:

Section 634 of Public Law 99-514, the Tax Reform Act of 1986 directed the Secretary of the Treasury or his delegate to study reforms of the taxation of corporate income under Subchapter C of the Internal Revenue Code. This mandate is quite broad. We concluded that a comprehensive study of the issues presented by integration of the corporate and individual income tax would address fundamental questions concerning how the corporate income tax might be restructured to reduce tax distortions of important corporate financial decisions and to achieve a more efficient system. Given the prevalence of integrated corporate income tax systems in the world today, we believe that an examination of these substantial issues should precede consideration of other, less fundamental, approaches to corporate income tax reform. Accordingly, this Report is submitted pursuant to the statutory directive cited above.

I am sending a similar letter to Senator Bob Packwood.

Sincerely,

Kenneth W. Gideon
Assistant Secretary
(Tax Policy)

PREFACE

The so-called classical system of current U.S. tax law treats corporations and their investors as separate entities and levies tax at both the corporate and shareholder levels on earnings from investments in corporate equity. Corporate earnings distributed to lenders as interest are generally deductible by the corporation and taxed, if at all, to the lender. Investors who conduct business activity in noncorporate form, such as a sole proprietorship or partnership, are taxed once on their earnings at the owners' tax rate.

As a result, despite the critical role played by corporations as a vehicle for economic growth, the United States tax law often perversely penalizes the corporate form of organization. The current system of taxation also distorts corporate financial decisions—in particular by encouraging debt and discouraging new equity financing of corporate investments. The tax system also prejudices corporate decisions about whether to retain earnings or pay dividends and encourages corporations to distribute earnings in a manner to avoid the double-level tax.

Integration of the individual and corporate tax system would tax corporate income once and reduce or eliminate these economic distortions. Most trading partners of the United States have integrated their corporate tax systems. The potential economic gains from integration are substantial.

This Report examines in detail several different integration prototypes, although it does not attempt an exhaustive discussion of all possible integration systems or of all the technical issues raised by the alternative prototypes.

This Report does not contain legislative recommendations. Rather, it is intended to stimulate discussion of the various prototypes and issues they raise. By advancing the opportunity for such debate, this Report should encourage serious consideration of proposals for integrating the individual and corporate tax systems in the United States.

EXECUTIVE SUMMARY

WHAT IS INTEGRATION AND WHY SHOULD IT BE BENEFICIAL?

Currently, our tax system taxes corporate profits distributed to shareholders at least twice—once at the shareholder level and once at the corporate level. If the distribution is made through multiple unrelated corporations, profits may be taxed more than twice. If, on the other hand, the corporation succeeds in distributing profits in the form of interest on bonds to a tax-exempt or foreign lender, no U.S. tax at all is paid.

The two-tier tax system (i.e., imposing tax on distributed profits in the hands of shareholders after taxation at the corporate level) is often referred to as a classical tax system. Over the past two decades, most of our trading partners have modified their corporate tax systems to "integrate" the corporate and shareholder taxes to mitigate the impact of imposing two levels of tax on distributed corporate profits. Most typically, this has been accomplished by providing the shareholder with a full or partial credit for taxes paid at the corporate level.

Integration would reduce three distortions inherent in the classical system:

- (a) The incentive to invest in noncorporate rather than corporate businesses. Current law's double tax on corporations creates a higher effective tax rate on corporate equity than on non-corporate equity. The additional tax burden encourages "self-help" integration through disincorporation.
- (b) The incentive to finance corporate investments with debt rather than new equity. Particularly in the 1980s, corporations issued substantial amounts of debt. By 1990, net interest expense reached a postwar high of 19 percent of corporate cash flow.
- (c) The incentive to retain earnings or to structure distributions of corporate profits in a manner to avoid the double tax. Between 1970 and 1990, corporations' repurchases of their own shares grew from \$1.2 billion (or 5.4 percent of dividends) to \$47.9 billion (or 34 percent of dividends). By 1990, over one-quarter of corporate interest payments were attributable to the substitution of debt for equity through share repurchases.

These distortions raise the cost of capital for corporate investments; integration could be expected to reduce it. To the extent that an integrated system reduces incentives for highly-leveraged corporate capital structures, it would provide important non-tax benefits by encouraging the adoption of capital structures less vulnerable to instability in times of economic downturn. The Report contains estimates of substantial potential economic gains from integration. Depending on its form, the Report estimates that integration could increase the capital stock in the corporate sector by \$125 billion to \$500 billion, could decrease the

debt-asset ratio in the corporate sector by 1 to 7 percentage points and could produce an annual gain to the U.S. economy as a whole from \$2.5 billion to \$25 billion.

PROTOTYPES

This Report defines four integration prototypes and provides specifications for how each would work. Three prototypes are described in Part II: (1) the dividend exclusion prototype, (2) the shareholder allocation prototype, and (3) the Comprehensive Business Income Tax (CBIT) prototype. In addition, in Part IV, titled "Roads Not Taken," the Report describes the imputation credit prototype and a dividend deduction alternative. For administrative reasons that the Report details, we have not recommended the shareholder allocation prototype (a system in which all corporate income is allocated to shareholders and taxed in a manner similar to partnership income under current law). Simplification concerns led us to prefer the dividend exclusion to any form of the imputation credit prototype.

In the dividend exclusion prototype, shareholders exclude dividends from income because they have already been taxed at the corporate level. Dividend exclusion provides significant integration benefits and requires little structural change in the Internal Revenue Code. When fully phased in, dividend exclusion would cost approximately \$13.1 billion per year.

CBIT is, as its name implies, a much more comprehensive and larger scale prototype and will require significant statutory revision. CBIT represents a long-term, comprehensive option for equalizing the tax treatment of debt and equity. It is not expected that implementation of CBIT would begin in the short term, and full implementation would likely be phased in over a period of about 10 years. In CBIT, shareholders and bondholders exclude dividends and interest received from corporations from income, but neither type of payment is deductible by the corporation. Because debt and equity receive identical treatment in CBIT, CBIT better achieves tax neutrality goals than does the dividend exclusion prototype. CBIT is self-financing and would permit lowering the corporate rate to the maximum individual rate of 31 percent on a revenue neutral basis, even if capital gains on corporate stock were fully exempt from tax to shareholders.

POLICY RECOMMENDATIONS

In addition to describing prototypes, the Report makes several basic policy recommendations which we believe should apply to any integration proposal ultimately adopted:

- (a) Integration should not result in the extension of corporate tax preferences to shareholders. This stricture is grounded in both policy and revenue concerns and has been adopted by every country with an integrated system. The mechanism for preventing passthrough of preferences varies; some countries utilize a compensatory tax mechanism and others simply tax preference-sheltered income when distributed (as we recommend in the dividend exclusion prototype). Both of these mechanisms are discussed in the Report.

- (b) Integration should not reduce the total tax collected on corporate income allocable to tax-exempt investors. Absent this restriction, business profits paid to tax-exempt entities could escape all taxation in an integrated system. This revenue loss would prove difficult to finance and would exacerbate distortions between taxable and tax-exempt investors.
- (c) Integration should be extended to foreign shareholders only through treaty negotiations, not by statute. This is required to assure that U.S. shareholders receive reciprocal concessions from foreign tax jurisdictions.
- (d) Foreign taxes paid by U.S. corporations should not be treated, by statute, identically to taxes paid to the U.S. Government. Absent this limitation, integration could eliminate all U.S. taxes on foreign source profits in many cases.

A table summarizing the characteristics of each of the prototypes follows.

OBJECTIVES OF THE REPORT

This Report is not a legislative proposal but rather a source document to begin the debate on the desirability of integration. This Report concludes that integration is desirable and presents a variety of integration mechanisms. A major reform such as integration should be undertaken only after appropriate deliberation and consideration of public comments. In light of the increasing isolation of the United States as one of the few remaining countries with a classical tax system, serious consideration of integration is now appropriate.

Comparison of the four principal integration prototypes

		Prototype			
		Dividend Exclusion Prototype	Shareholder Allocation Prototype	CBIT Prototype	Imputation Credit Prototype
Rates					
a)	Distributed Income	Corporate rate	Shareholder rate ¹	CBIT rate (31 percent)	Shareholder rate ¹
b)	Retained Income ²	Corporate rate (additional shareholder level tax depends on the treatment of capital gains; see Chapter 8)	Shareholder rate	CBIT rate (additional investor level tax depends on the treatment of capital gains; see Chapter 8)	Corporate rate (additional shareholder level tax depends on the treatment of capital gains; see Chapter 8)
Treatment of non-corporate businesses		Unaffected	Unaffected	CBIT applies to non-corporate businesses as well as corporations, except for very small businesses.	Unaffected
Corporate tax preferences		Does not extend preferences to shareholders. Preference income is subject to shareholder tax when distributed.	Extends preferences to shareholders.	Does not extend preferences to investors. Preference income is subject to compensatory tax or investor level tax when distributed.	Does not extend preferences to shareholders. Preference income is subject to shareholder tax when distributed.
Tax-exempt investors		Corporate equity income continues to bear one level of tax.	Corporate equity income continues to bear one level of tax.	A CBIT entity's equity income and income used to pay interest bear one level of tax.	Corporate equity income continues to bear one level of tax.
Foreign source income		Foreign taxes are creditable at the corporate level, but shielded income is subject to shareholder tax when distributed.	Foreign taxes are creditable at the corporate level and at the shareholder level.	Foreign taxes are creditable at the entity level, but shielded income is subject to compensatory tax or an investor level tax when distributed.	Foreign taxes are creditable at the corporate level, but shielded income is subject to shareholder tax when distributed.
Foreign investors		Corporate equity income continues to bear tax at the corporate level and current withholding taxes (eligible for treaty reduction) continue to apply to distributions.	Corporate equity income continues to bear tax at the corporate level and current withholding taxes (eligible for treaty reduction) continue to apply to distributions.	A CBIT entity's equity income and income used to pay interest bear tax only at the entity level, and no withholding taxes are imposed on distributions to equity holders or on payments of interest.	Corporate equity income continues to bear tax at the corporate level and current withholding taxes (eligible for treaty reduction) continue to apply to distributions.
Treatment of debt		Unaffected	Unaffected	Equalizes treatment of debt and equity	Unaffected (unless bondholder credit system adopted)

¹Plus 3 percentage points of corporate level tax not creditable because the prototype retains the 34 percent corporate rate but provides credits at the 31 percent shareholder rate.

²Assuming no DRIP. See Chapter 9.

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PART I: THE CASE FOR INTEGRATION

CHAPTER 1: INTRODUCTION

1.A THE CORPORATE TAX: NEED FOR CHANGE

Issues

Current U.S. tax law treats corporations and their investors as separate taxable entities. Under this classical system of corporate income taxation, two levels of income tax are generally imposed on earnings from investments in corporate equity. First, corporate earnings are taxed at the corporate level. Second, if the corporation distributes earnings to shareholders, the earnings are taxed again at the shareholder level. In contrast, investors in business activities conducted in non-corporate form, such as sole proprietorships or partnerships, are generally taxed only once on the earnings, and this tax is imposed at the individual level. Corporate earnings distributed as interest to suppliers of debt capital also are taxed only once because interest is deductible by the corporation and generally taxed to lenders as ordinary income.

Despite its long history, considerable debate surrounds the role of the corporate income tax in the Federal tax structure. The central issue is whether corporate earnings should be taxed once rather than taxed both when earned and when distributed to shareholders. Integration of the individual and corporate income tax refers to the taxation of corporate income once. This Report discusses and evaluates several integration alternatives.¹

Despite their differences, the methods of integration studied in this Report reflect a common goal: where practical, fundamental economic considerations, rather than tax considerations, should guide business investment, organization, and financial decisions. The Tax Reform Act of 1986 (the 1986 Act)² made the tax system significantly more neutral in its impact on business decisions about capital investment by reducing tax rates and tax preferences. The 1986 Act,

however, did not address tax-related distortions of business organizational and financing decisions. In fact, the 1986 reforms may have increased the pressure to select noncorporate organizational forms by imposing a higher marginal rate on corporations than on individuals and by repealing the *General Utilities*³ doctrine, which had protected corporations from corporate level tax on liquidating dispositions of corporate assets. Corporate integration can thus be regarded as a second phase of tax reform in the United States, extending the goal of neutral taxation to the choice of business organization and financial policy.

The current two-tier system of corporate taxation discourages the use of the corporate form even when incorporation would provide nontax benefits, such as limited liability for the owners, centralized management, free transferability of interests, and continuity of life. The two-tier tax also discourages new equity financing of corporate investment, encourages debt financing of such investment, distorts decisions with respect to the payment of dividends, and encourages corporations to distribute earnings in a manner designed to avoid the double-level tax.

These distortions have economic costs. The classical corporate tax system reduces the level of investment and interferes with the efficient allocation of resources. In addition, the tax bias against corporate equity can encourage corporations to increase debt financing beyond levels supported by nontax considerations, thereby increasing risks of financial distress and bankruptcy.

Historically, the corporation has been an important vehicle for economic growth in the United States, but the classical corporate tax system often perversely penalizes the corporate form of organization. With the increasing integration of international markets for products and capital, one must consider effects of the corporate

tax system on the competitiveness of U.S. firms. Most of the major trading partners of the United States have revised their tax systems to provide for some integration of the corporate and individual tax systems.

This Report provides a comprehensive study of integration, including both the legal and economic foundations for implementing integration in the United States. We present three prototypes representing a range of integration systems and recommend two prototypes that implement our policy goals. One prototype, a dividend exclusion system, can be implemented with minimal changes to current law. The second, the Comprehensive Business Income Tax (CBIT), extends the dividend exclusion model to debt. CBIT achieves the important goal of equating the treatment of debt and equity, but because it represents a greater departure from current law, it would require a longer transition period. We have included, albeit with substantial reservations as to feasibility, a third prototype—a shareholder allocation system, often referred to as full integration. We considered it necessary to examine such a prototype because this system is so frequently viewed as ideal by proponents of integration, although we ultimately reject it on both policy and administrative grounds.

The Report also documents the substantial economic benefits of integration. We estimate that any of the three prototypes would increase the capital stock in the corporate sector by \$125 to \$500 billion and would decrease the debt to asset ratio in the corporate sector from 1 to 7 percentage points. Further, efficiency gains from integration would be equivalent to annual welfare gain for the U.S. economy as a whole of 0.07 to 0.7 percent of annual consumption (or \$2.5 to \$25 billion (in 1991 dollars)).⁴ See Chapter 13.

Brief Description of Current Law

Under current law, income earned by corporations is taxed at the corporate level, generally at a marginal rate of 34 percent.⁵ When the corporation distributes earnings to shareholders in the form of dividends, the income is generally taxed

again at the shareholder level.⁶ If corporations retain earnings, the value of their stock will generally increase to reflect those earnings. When shareholders sell their stock, gains from the sale are taxed also. Thus, like income distributed as dividends, retained corporate income generally is taxed twice. In contrast, investors who conduct business activity in noncorporate form, such as through a sole proprietorship or partnership, are taxed once on their earnings at their individual tax rate.

Dividends distributed to individual U.S. citizens and residents are taxed generally at marginal rates of 15, 28, or 31 percent.⁷ Dividends distributed to nonresident aliens and foreign corporations by U.S. corporations are generally subject to a nonrefundable "withholding" tax, currently set by statute at 30 percent. United States treaties with trading partners frequently reduce the rate to 15 or 5 percent on a reciprocal basis. Dividends received by U.S. corporate shareholders generally qualify for a dividends received deduction of 70, 80 or 100 percent, depending on the degree of affiliation between the corporations. Shareholders' gains from sales of corporate stock are taxed also, typically as capital gains, although capital gains of foreign shareholders generally are exempt from U.S. tax.

Unlike dividends, interest is generally deductible by corporations. Interest income received by domestic lenders is generally taxed at their marginal tax rates. Interest income received by foreign lenders from U.S. corporations, however, generally is not subject to U.S. tax.⁸

Tax-exempt entities supply a substantial portion of the corporate capital in the United States. These tax-exempt entities include pension funds and educational, religious and other charitable organizations. These entities are generally not taxed on interest, dividends or gains from the sale of their investments. However, the corporate level tax applies to corporate income attributable to the equity capital they supply. Tax-exempt entities may be subject to the unrelated business income tax (UBIT) on earnings from equity investments in partnerships.

1.B THE CORPORATE TAX AND ECONOMIC DISTORTIONS

The classical corporate income tax system distorts three economic and financial decisions: (1) whether to invest in noncorporate rather than corporate form, (2) whether to finance investments with debt rather than equity, and (3) whether to retain rather than distribute earnings. Apart from corporate and investor level tax considerations, nontax benefits and costs also influence these decisions. To the extent that the classical tax system distorts the choice of organizational form, financial structure, and dividend policy, economic resources can be misallocated.⁹

The Cost of Capital As a Measure of Investment Incentives

This Report examines distortions resulting from the corporate income tax in terms of effects on the cost of capital. In deciding whether to undertake an investment, firms require that the investment provide a sufficient after-tax return to compensate investors. The cost of capital is the pre-tax rate of return that is sufficient to cover operating expenses, taxes, economic depreciation, and the investor's required after-tax rate of return. Thus, the cost of capital depends in part on the return firms must pay to suppliers of debt or equity capital to attract funds. The cost of capital also depends on such factors as tax rates, the investment's economic depreciation rate, the capital cost recovery deductions allowed on the investment, the inflation rate, and the source of financing for the investment. Because a higher cost of capital makes certain investments unprofitable, corporate and individual income taxes reduce investment incentives by raising the cost of capital.

This section uses the cost of capital as a framework for analyzing the effects of the current classical corporate tax system on the business decisions described above (i.e., form of business organization, form of financing, and retention of earnings). The final part of this section discusses the effect of the corporate income tax on savings and investment in the economy as a whole.

Organizational Form

The waste of economic resources from tax-distorted misallocation of capital between the noncorporate and corporate sectors was the original focus of criticism of the corporate income tax. Beginning with Harberger,¹⁰ economists have argued that a classical corporate tax system misallocates capital between the corporate and noncorporate sectors. Over the years, more sophisticated models have been developed to examine more carefully the efficiency costs of corporate taxation. Contemporary approaches suggest that these costs are significant. See Chapter 13.

A simple example illustrates the effect of the current corporate tax system on investment decisions. Suppose that an investor requires an after-tax rate of return of 8 percent and the investor's effective tax rate is 20 percent. An equity investment in a noncorporate enterprise must earn a return high enough to pay tax at the investor's rate (20 percent) and still yield the required 8 percent after-tax return.¹¹ The noncorporate investment must therefore earn a 10 percent pre-tax rate of return (net of depreciation) in order to cover the investor's income taxes and meet the required return ($0.10 \times (1 - 0.20) = 0.08$). However, if the corporate tax rate is 34 percent and the corporation distributes all of its income, the cost of capital of an equity financed investment in the corporate sector in the above example is 15.2 percent. This 15.2 percent pre-tax return yields an 8 percent return after paying both the corporate tax and the investor level tax on dividends ($0.152 \times (1 - 0.34) \times (1 - 0.20) = 0.08$). Since fewer investments can earn the higher required return (15.2 percent as opposed to 10 percent), the corporate tax discourages investment in the corporate sector by raising the cost of capital.

More complex calculations support this result. For example, a Congressional Research Service report estimates, under realistic assumptions, the total effective Federal income tax rate on corporate equity (taking into account both corporate level and shareholder level taxes) to be 48 percent, compared to 28 percent for noncorporate

equity.¹² Therefore, some corporations fail to undertake investments that would be profitable if the tax burden on corporate and noncorporate investments were the same. Moreover, for some business enterprises, the added corporate taxes exceed the nontax benefits of incorporation, causing such businesses to forego those benefits and to operate instead in noncorporate form. Figure 1.1 illustrates the differences in taxation of equity investments in corporate and non-corporate businesses.

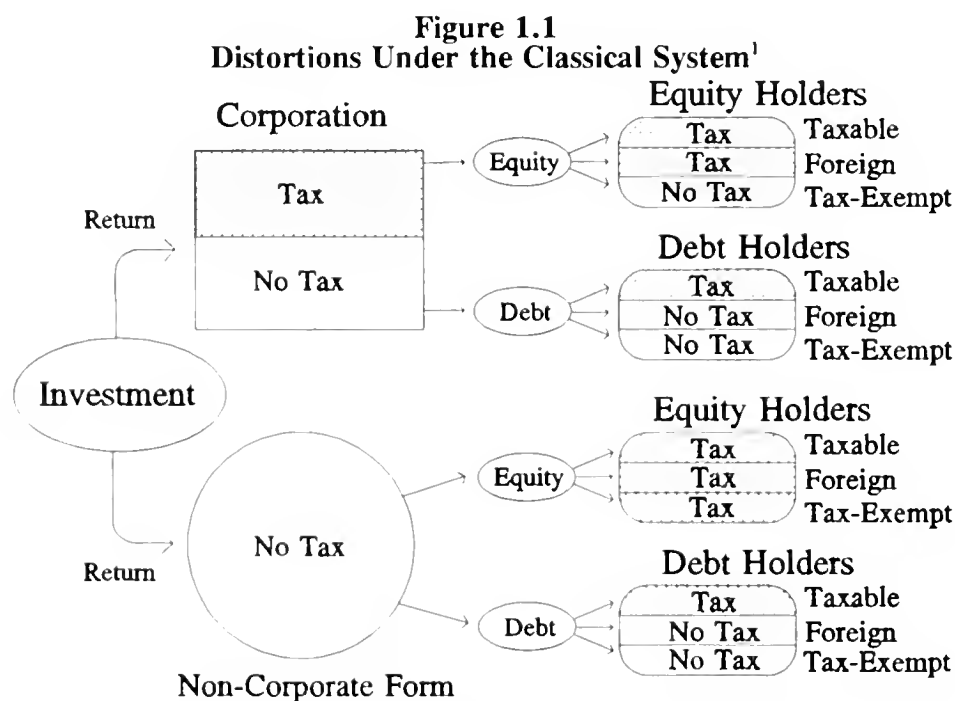
The bias against corporate sector investments compared with investments in the noncorporate sector reduces the productivity of the nation's capital investments and reduces potential national income. See Chapter 13. This reduction in productivity is a hidden cost of the corporate tax. In addition, the classical system encourages corporations to convert to noncorporate form, thereby abandoning the benefits of incorporation.¹³

Certain tax provisions mitigate this tax bias against corporate investment. First, by using debt to finance investments, corporations can reduce

the relative tax advantage of noncorporate firms. Considering only tax costs, corporate and noncorporate entities face the same cost of debt financed capital, because interest paid is deductible. Thus, corporations can reduce the difference in tax burdens for total investment by financing new investment with debt. Increases in debt may, however, increase the risk of financial distress or bankruptcy. Second, accelerated cost recovery deductions provide, in effect, an interest-free government loan to finance new investment. These deductions lower the total cost of capital for both corporate and noncorporate firms, but because corporate tax rates generally exceed individual tax rates, corporations realize greater tax benefits from accelerated depreciation. Thus, such deductions reduce, but do not eliminate, the additional tax burden on corporate equity investments.

Corporations also can reduce the distortion between corporate and noncorporate investments by distributing corporate income to shareholders through share repurchases and other nondividend distributions. The advantage of a nondividend

distribution is that it allows shareholders to recover the cost (or basis) of their shares, with any excess generally taxed as capital gains. Current law provides a slight rate preference for capital gains of individuals (a maximum rate of 28 percent compared with a maximum of 31 percent on other income). Capital gains also benefit from the deferral permitted under current law, because shareholders do not recognize gain until stock is sold, and capital assets receive a tax-free step-up in basis at death. The preferential tax treatment of capital gains reduces, but does not eliminate,



¹The figure does not take into account tax preferences or taxes imposed by other countries.

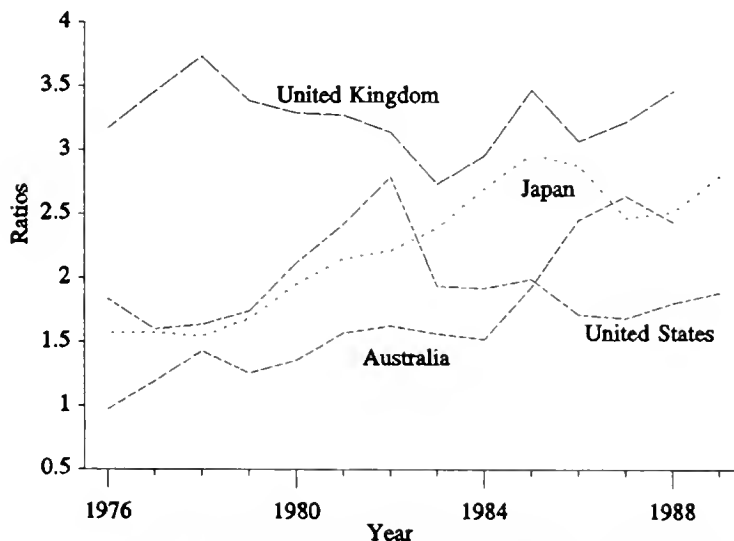
the distorting effect of the current corporate tax system on corporate level investment.

International comparisons add perspective on the effect of the corporate tax on the U.S. corporate sector. One measure is the ratio of corporate investment to investment in housing, which provides a comparison of resource allocation in different economies. Figure 1.2 presents the ratio of corporate gross fixed investment relative to private residential investment in the United States and three other industrialized countries for which data are available since 1976. Throughout the period, the United States had a lower ratio than the United Kingdom. Although the U.S. ratio exceeded that for Japan and Australia until the early 1980s, corporate investment relative to housing investment has tended upwards over the whole period for Japan and Australia while the ratio for the United States has remained fairly stable, except for the 2 years following the Economic Recovery Tax Act of 1981. Indeed, for the last 4 years for which data are available, the United States has had essentially the lowest corporate investment per dollar of housing investment of any of the four nations. A similar picture

of relatively low corporate investment in the United States is depicted in Figure 1.3, which presents the ratio of investment (net of depreciation) in the corporate sector relative to the total noncorporate sector (households and unincorporated businesses combined) during the same period for the same four countries plus France. By this measure, the United States had the lowest ratio of corporate to noncorporate investment during the last 3 years for which data are available for any of the five nations.

Another useful international comparison is the spread between the pre-tax return on corporate investment and the cost of funds in the United States and other countries. This spread, or corporate "tax wedge," generally depends upon the type of asset acquired, the corporate tax rate, the capital recovery allowances, the rate of inflation, and various other country specific factors. Table 1.1 presents a listing of preliminary OECD calculations of the 1991 corporate tax wedge based on a standardized mix of assets and sources of funding for a manufacturer located in several OECD member countries. According to these data, the corporate tax wedge in the United States is higher than in France or Germany, is approximately the same as in the U.K., and is lower than the tax wedge in Canada and Japan.

Figure 1.2
Ratio of Corporate Investment Relative to Residential Investment in Four Countries, 1976-1989



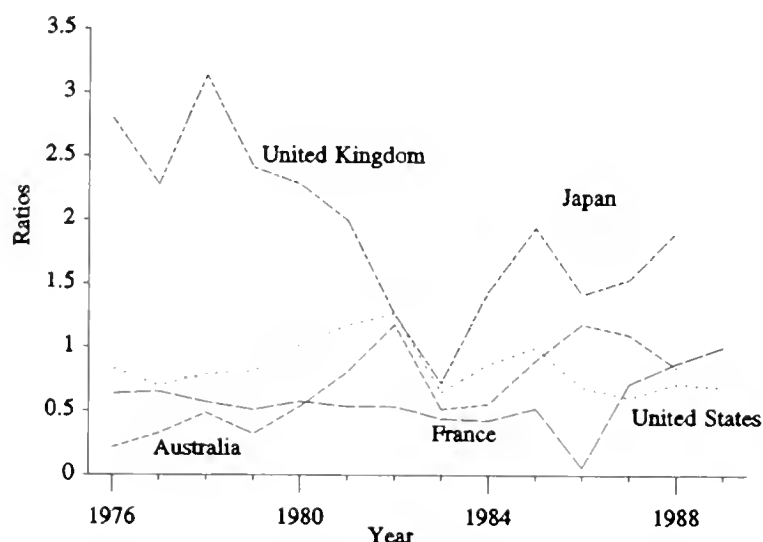
Source: Organisation for Economic Co-operation and Development, National Accounts (1976-1989).

Corporate Capital Structure

Corporations have three alternatives for financing new investments: (1) issuing new equity, (2) using retained earnings, or (3) issuing debt. There can be important nontax benefits and costs of alternative corporate financing arrangements, and the tax system should avoid prejudicing financial decisions.

The current classical corporate tax system discriminates

Figure 1.3
Ratio of Corporate Investment Relative to
Noncorporate (including Household) Investment
in Five Countries, 1976-1989



Source: Organisation for Economic Co-operation and Development, National Accounts (1976-1989).

Table 1.1
Corporate Tax Wedges for
New Investments in Manufacturing
1991

Country	Corporate Tax Wedge ¹
Canada	1.2
France	0.4
Germany	0.6
Japan	1.4
United Kingdom	0.9
United States	0.8

Department of the Treasury
Office of Tax Policy

¹The difference between the pre-corporate tax real rate of return and 5 percent (the real interest rate). The calculations assume no personal taxes and an inflation rate of 4.5 percent for all countries. The weights for the proportion of investment in each type of asset and the proportion of finance from each source of funds are assumed to be the same for each country: 50 percent for machinery, 27 percent for buildings, and 23 percent for inventories and 35 percent for debt, 10 percent for new equity, and 55 percent for retentions.

Source: Organisation for Economic Co-operation and Development, preliminary unpublished estimates.

against equity financing of new corporate investment. See Figure 1.1. Because of the two levels of taxation of corporate profits, the cost of equity capital generally exceeds the cost of debt capital. The Congressional Research Service estimates, under realistic assumptions, the total effective Federal income tax rate on corporate debt to be 20 percent, compared with 48 percent for corporate equity.¹⁴ Moreover, the total effective tax rate on debt can be negative. The lower effective tax rate for debt financed corporate investment than for equity financed corporate investment encourages the use of debt by corporations, assuming nontax factors that affect financing decisions do not change.

If a corporation borrows from an individual to finance an investment, the corporation deducts the interest payments from its taxable income and is therefore not taxed on the investment's pre-tax return to the extent of interest payments, although the lender is taxable on the interest at the individual tax rate.¹⁵ Consequently, to the extent that corporations finance investment with debt, current law does not distort the choice between investment in the corporate and noncorporate sectors. Using the assumptions in the numerical example set forth under "Organizational Form," above, for a 100 percent debt financed corporate

investment, the cost of capital is 10 percent ($0.10 \times (1 - 0.2) = 0.08$, the required rate of return). This cost is well below the 15.2 percent cost of capital for equity financed investments for corporations that distribute income as dividends, and is the same as the cost of capital for a non-corporate investment.

Recent Trends in Corporate Debt

Historical data show U.S. corporate debt to be at relatively high levels by postwar standards, with some, but not all, measures growing at an unusually rapid pace in the 1980s. Because there is no single, universally agreed-upon measure of debt, the discussion below considers trends based on alternative measures.

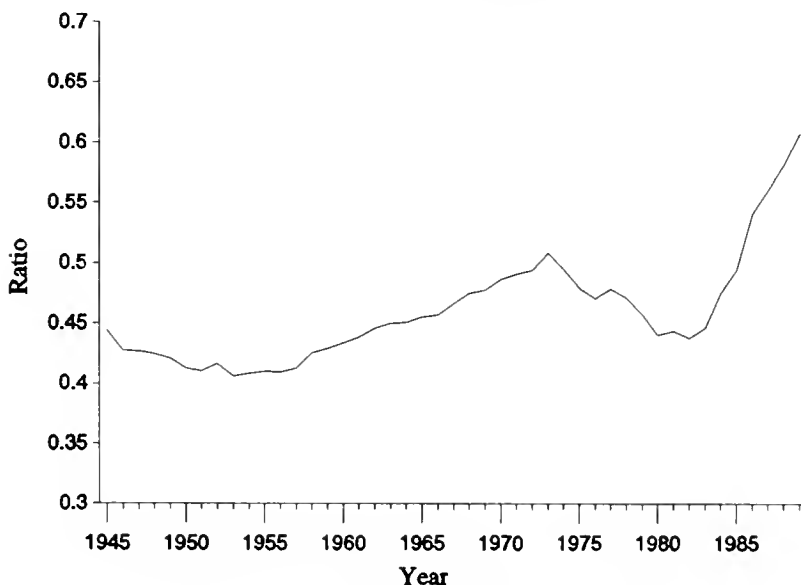
One group of debt measures focuses on corporate balance sheets: the ratio of debt to total assets. The debt to asset ratio can be computed using either book value (the par value of debt and the historical cost of assets as reported for financial accounting purposes) or market value. Figure 1.4 displays one book value measure, the

ratio of credit market debt to the book value of tangible assets for nonfinancial corporations, based on Federal Reserve Board data. This ratio grew from 43 percent in 1948 to 61 percent in 1989. Although the ratio generally increased over the postwar period, it declined sharply beginning in 1975 and continuing through the mid 1980s. Following that decrease, the ratio began to rise again and by 1989 had reached a postwar high of 61 percent. In 1989, this book-value debt to asset ratio was more than 17 percentage points higher than in 1980, but only 10 percentage points higher than the pre-1980s peak of 51 percent reached in 1973.

Figure 1.5 presents Federal Reserve Board data showing the ratio of the market value of debt to the market value of the firm (debt plus equity) for nonfinancial corporations from 1961 through 1989. Like the book-value measure, the market-value ratio indicates that corporate debt has generally increased since 1961. In 1961, debt represented 26 percent of the total market value of the capital stock of nonfinancial corporations compared to 38 percent of total market value in

1989. The market-value data, however, suggest that the dramatic increase in corporations' use of debt occurred in the middle 1970s. Indeed, the market-value ratio peaked at 47 percent in 1974, a year in which the stock market fell sharply. During the 1980s, the market-value ratio does not show a discernible upward trend because rising stock market prices largely offset the growth in the dollar amount of debt during this period. In contrast, the book-value measure described in the preceding paragraph shows a large increase during the 1980s, because stock market growth is not reflected directly in the book-value measure, and thus does not offset the rising dollar volume of debt.¹⁶

Figure 1.4
Ratio of Credit Market Debt to the
Book Value of Tangible Assets
Nonfinancial Corporations

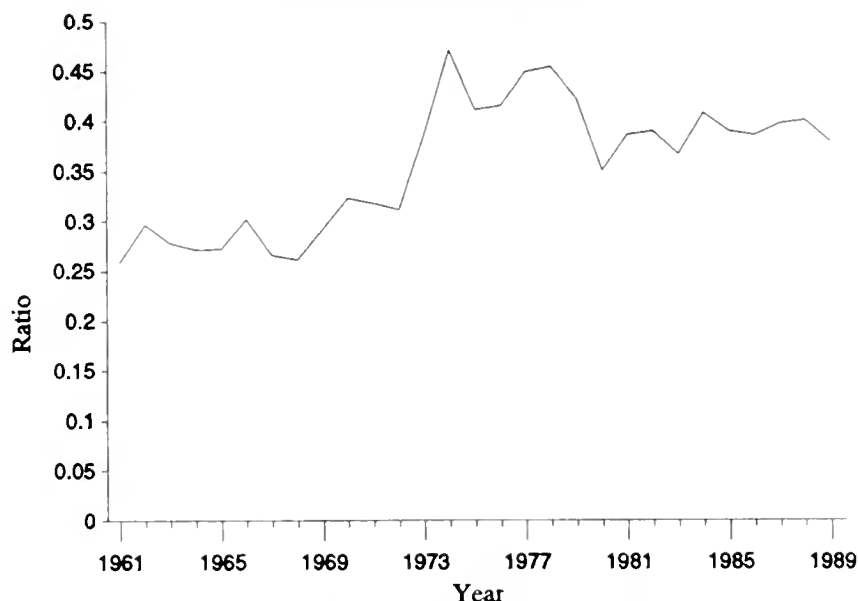


Source: Federal Reserve Board, *Flow of Funds Accounts* (various issues).

A second measure of leverage focuses on the importance of debt in corporations' sources of additional funds rather than corporations' total outstanding debt. See Table 1.2. Over the entire postwar period, equity finance was dominant. For nonfinancial corporations, retained earnings and net new equity issues accounted for roughly 78 percent of funds raised. Debt provided the balance, divided about equally between private issues (bank loans and private placements) and public issues (bonds). Relative financing patterns changed during the 1980s. While corporations continue to rely heavily on retained earnings, they have sharply adjusted the composition of external finance. Most notably, corporations have undertaken substantial repurchases of equity, financed mainly with debt.¹⁷ In (current) dollar terms, this pattern is illustrated in the left panel of Figure 1.6. The increase in nonfinancial corporate debt during the early and middle 1980s was largely matched by a reduction in outstanding equity. As shown in the right panel of Figure 1.6, nonfinancial corporations relied significantly more on internal funds (retained earnings) during the 1980s than was the case for the postwar period as a whole.

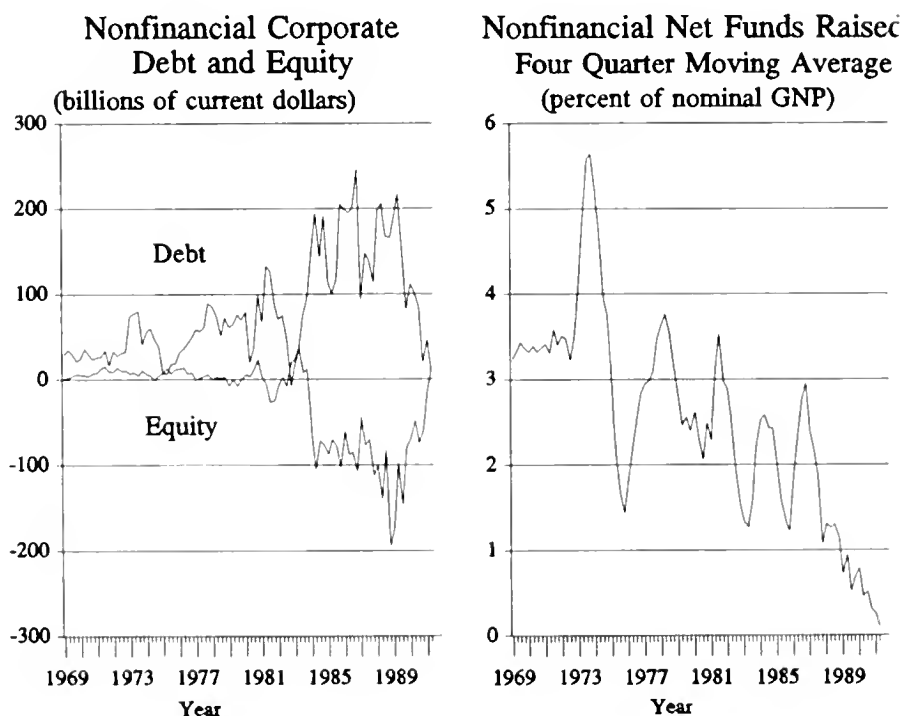
Recent evidence suggests that share repurchases have contributed to the increase in

Figure 1.5
Ratio of Market Value of Debt to
Market Value of the Firm
Nonfinancial Corporations



Source: Federal Reserve Board, unpublished estimates.

Figure 1.6
Changing Sources of Funds for the Corporate Sector



Source: Strongin (1991).

Table 1.2
Sources of Funds, Nonfinancial Corporations, 1946-1990

Year	Amount (millions of dollars)				Shares			
	Internal	New Debt	Net New	Total	Internal	New Debt	Net New	
	Funds	Issues	Equity Issues	Funds	Funds	Issues	Equity Issues	
1946	\$8,503	\$6,103	\$1,018	\$15,624	54.4%	39.1%	6.5%	
1947	13,335	7,306	1,093	21,734	61.4%	33.6%	5.0%	
1948	19,651	6,398	1,000	27,049	72.6%	23.7%	3.7%	
1949	20,024	1,826	1,212	23,062	86.8%	7.9%	5.3%	
1950	18,539	6,772	1,288	26,599	69.7%	25.5%	4.8%	
1951	20,761	8,770	2,107	31,638	65.6%	27.7%	6.7%	
1952	22,457	6,852	2,320	31,629	71.0%	21.7%	7.3%	
1953	22,334	4,022	1,766	28,122	79.4%	14.3%	6.3%	
1954	24,403	4,714	1,583	30,700	79.5%	15.4%	5.2%	
1955	29,943	8,557	1,719	40,219	74.4%	21.3%	4.3%	
1956	30,045	10,397	2,250	42,692	70.4%	24.4%	5.3%	
1957	31,983	9,587	2,441	44,011	72.7%	21.8%	5.5%	
1958	30,659	8,395	1,968	41,022	74.7%	20.5%	4.8%	
1959	36,434	10,150	2,078	48,662	74.9%	20.9%	4.3%	
1960	35,842	9,976	1,365	47,183	76.0%	21.1%	2.9%	
1961	36,895	9,853	2,121	48,869	75.5%	20.2%	4.3%	
1962	43,219	12,591	369	56,179	76.9%	22.4%	0.7%	
1963	46,967	12,245	(341)	58,871	79.8%	20.8%	-0.6%	
1964	52,309	12,667	1,145	66,121	79.1%	19.2%	1.7%	
1965	59,098	18,931	(28)	78,001	75.8%	24.3%	-0.0%	
1966	63,274	23,451	1,259	87,984	71.9%	26.7%	1.4%	
1967	64,250	24,924	2,397	91,571	70.2%	27.2%	2.6%	
1968	65,766	27,677	(159)	93,284	70.5%	29.7%	-0.2%	
1969	65,195	28,995	3,406	97,596	66.8%	29.7%	3.5%	
1970	62,693	28,484	5,694	96,871	64.7%	29.4%	5.9%	
1971	74,614	25,986	11,435	112,035	66.6%	23.2%	10.2%	
1972	86,214	31,463	10,922	128,599	67.0%	24.5%	8.5%	
1973	93,704	68,439	7,883	170,026	55.1%	40.3%	4.6%	
1974	88,972	50,835	4,097	143,904	61.8%	35.3%	2.8%	
1975	124,249	13,171	9,908	147,328	84.3%	8.9%	6.7%	
1976	141,272	40,138	10,524	191,934	73.6%	20.9%	5.5%	
1977	164,401	66,695	2,727	233,823	70.3%	28.5%	1.2%	
1978	181,914	70,970	(101)	252,783	72.0%	28.1%	-0.0%	
1979	197,206	68,142	(7,836)	257,512	76.6%	26.5%	-3.0%	
1980	199,772	58,206	10,375	268,353	74.4%	21.7%	3.9%	
1981	239,098	104,085	(13,450)	329,733	72.5%	31.6%	-4.1%	
1982	241,901	46,567	1,900	290,368	83.3%	16.0%	0.7%	
1983	285,217	56,521	20,000	361,738	78.8%	15.6%	5.5%	
1984	335,885	170,828	(78,975)	427,738	78.5%	39.9%	-18.5%	
1985	351,815	134,260	(84,500)	401,575	87.6%	33.4%	-21.0%	
1986	344,294	209,718	(84,975)	469,037	73.4%	44.7%	-18.1%	
1987	372,448	123,749	(75,500)	420,697	88.5%	29.4%	-17.9%	
1988	391,371	184,633	(129,500)	446,504	87.7%	41.4%	-29.0%	
1989	380,010	159,537	(124,150)	415,397	91.5%	38.4%	-29.9%	
1990	369,458	86,186	(63,000)	392,644	94.1%	22.0%	-16.0%	

Department of the Treasury
Office of Tax Policy

Source: Federal Reserve Board, Flow of Funds Accounts (various issues).

corporate debt. Rather than simply replacing dividends, repurchases have been financed primarily by debt, which results in higher interest costs.¹⁸ Increased share repurchases, therefore, accounts for part of the recent increases in net interest payments, and may be viewed as one method that firms have used to reduce their corporate tax liabilities. Table 1.3 presents estimates of the portion of net interest payments of nonfinancial corporations that might be attributable to "excess" share repurchases of the 1980s, where the excess is the difference between actual repurchases and the levels that would have occurred if the ratio of repurchases to dividends had continued at its average for the 1970s.¹⁹ The table shows that, by 1990, over one quarter of the interest payments of nonfinancial corporations was attributable to increased share repurchases.²⁰

A third measure of corporate debt focuses on the ability of corporations to service their debt. Corporations meet their interest payments out of the cash available after other payments, such as those for labor, materials, energy, and taxes. Cash flow, calculated as after-tax profits plus depreciation, serves as a measure of funds from which a corporation can cover its interest payments. Figure 1.7 shows the ratio of net interest to cash flow for nonfinancial corporations from 1948 through 1990. These data show a generally upward trend over time with substantial increases in the late 1960s and early 1970s, again in the early 1980s, and in the last 2 years (1989 and 1990). After reaching 19 percent in 1982, the ratio of net interest to cash flow showed little upward movement through 1988 but has increased in 1989 and 1990. By 1990, it reached a postwar high of 19 percent. Firm level data document a similar pattern.²¹

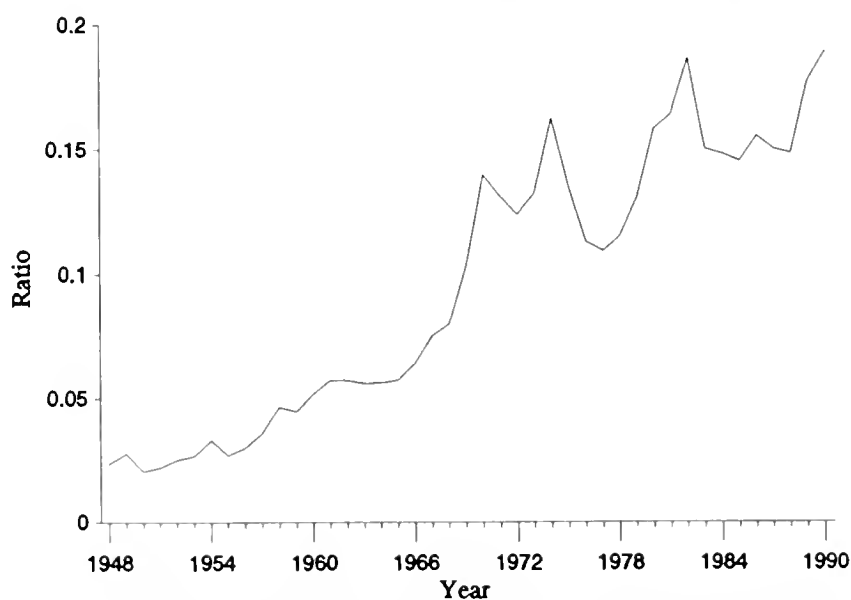
Table 1.3
Estimates of Maximum Amount of
Interest Attributable to
Increased Share Repurchases
1980-1990

Year	Percentage of Net Interest of Nonfinancial Corporations
1980	1.0
1981	0.9
1982	1.3
1983	1.8
1984	5.4
1985	11.2
1986	12.4
1987	18.2
1988	23.6
1989	23.4
1990	25.5

Department of the Treasury
Office of Tax Policy

Source: Office of Tax Policy calculations based on Standard and Poor's COMPUSTAT data and on information in Poterba (1987).

Figure 1.7
Ratio of Net Interest to Cash Flow, 1948-1990
Nonfinancial Corporations



Sources: Department of Commerce (1986) and Department of Commerce, Survey of Current Business (July, various years).

Some economists also are concerned that high debt-service burdens (by postwar standards) during the 1980s have been associated with an increase in corporate bankruptcies. While bankruptcies followed a cyclical pattern over most of the postwar period, they remained high (relative to postwar standards) throughout the expansion following the 1981-1982 recession.²²

Benefits and Costs of Corporate Debt

Debt finance may have nontax benefits. Analysts most sanguine about high levels of corporate debt and debt-service burdens typically maintain that the discipline of debt is desirable because it gives lenders indirect means to monitor the activities of managers. This need for supervision owes to the separation between ownership and management that is characteristic of the traditional corporate structure.²³

A disadvantage of higher debt levels is that they can increase nontax costs of debt, including costs associated with financial distress. Even when corporations avoid formal bankruptcy proceedings, they incur costs when they cannot meet their interest obligations or when debt covenants restrict operating flexibility. The costs include extra demands on executives' time, supply disruptions, declines in customers' confidence, and, frequently, significant legal fees. Corporations therefore must evaluate the tax and nontax benefits of additional debt relative to these costs. Tax-induced distortions in capital structure can entail significant efficiency costs.²⁴

Corporate Dividend Distributions

The current system of corporate taxation also may distort a corporation's choice between distributing or retaining earnings and, if amounts are distributed, whether they are paid in the form of a nondividend distribution, such as a share repurchase. Differences in effective tax rates on dividends and retained earnings are significant.²⁵

Assessing the efficiency costs of such tax differentials requires an analysis of motives for corporate dividend distributions in the presence of

relatively high taxes on such dividends compared to capital gains. This Report assumes that corporate dividends offer special nontax benefits to shareholders that offset their tax disadvantage,²⁶ and, accordingly, that corporations set dividend payments so that the incremental nontax benefit of dividends paid equals their incremental tax cost. Under this assumption, the amount of dividends paid out is expected to decrease as the tax burden on dividends relative to capital gains increases; empirical studies are consistent with this prediction.²⁷ Investor level taxes on dividends also raise the cost of capital (and thereby reduce investment) to the extent that corporations pay out earnings as dividends. Thus, under the assumptions used in this Report, dividend taxes reduce the payout ratio and real investment incentives.

The growth in share repurchases in the last decade supports this view of the linkage between the corporate tax and corporate dividends. Share repurchases provide a means of distributing corporate earnings with, in many cases, more favorable shareholder level tax treatment than dividend distributions. While a shareholder pays tax on the full amount of a dividend at ordinary income rates, the shareholder generally pays tax on the proceeds of a share repurchase only to the extent they exceed share basis and, in some cases, at a preferential capital gains rate. Share repurchases increased substantially from 1970 to 1990, growing from \$1.2 billion (or 5.4 percent of dividends) to \$47.9 billion (or 34 percent of dividends), and peaking in 1989 at \$65.8 billion (or 47 percent of dividends).²⁸

Savings and Investment

The corporate tax increases the tax burden on the returns from saving and investing. The magnitudes of tax-induced distortions of investment and savings decisions depend on two factors: the size of the spread (or wedge) between pre-tax and after-tax returns and the responsiveness of savers and investors to changes in after-tax returns. The more responsive savers and investors are to changes in rates of return, the larger the effect of a tax wedge of a given size.²⁹ The Report documents significant wedges between pre-tax and

after-tax returns to saving and investment. While empirical evidence on the effect of changes in the after-tax return on savings is in conflict, there is substantial empirical evidence documenting important effects of capital taxation on investment.³⁰ See Chapter 13.

In the presence of international capital flows, the U.S. corporate income tax can reduce incentives to invest in the United States, even if it has a relatively small effect on saving by U.S. citizens.

1.C NEUTRALITY AS THE GOAL OF INTEGRATION

Integration would reduce and in some cases eliminate the distortions of business decisions under the current tax system by coordinating the individual and corporate income tax systems so corporate income is taxed only once. Broadly speaking, corporate tax integration seeks to reduce tax-induced distortions in the allocation of capital by taxing corporate income once, rather than zero, once, or multiple times as under the current regime. Integration has attracted the attention of tax policymakers for many years. The Department of the Treasury and the Congress have considered integration on several occasions, most recently in 1984 and 1985.³¹ Many industrial countries have long had integrated systems; several others have recently adopted integration.³²

The classical system of corporate taxation is inefficient because it creates differences in the taxation of alternative sources of income from capital. Under the classical system, a taxpayer conducting business in corporate form faces a different tax burden on equity financing than a taxpayer conducting the same business in non-corporate form. A corporation that raises capital in the form of equity faces a different tax burden than a corporation that raises the same amount of capital from debt. A similar disparity exists in the treatment of corporations that finance with retained earnings and those that pay dividends and finance with new equity. This Report provides evidence that these distortions impose significant economic costs, including reduced financial

flexibility of corporations and an inefficient allocation of capital.

A traditional goal of integration proposals has been to tax corporate income only once at the tax rate of the shareholder to whom the income is attributed or distributed.³³ Under the traditional approach, corporate income ideally would be taken into account when earned in determining each individual's economic income and would be taxed at each individual's marginal tax rate.³⁴ To illustrate, assume that a corporation has \$100 of income on which it pays \$34 in corporate tax. The corporation's shareholder has a marginal rate of 28 percent. Traditional proposals would typically treat the shareholder as having received income of \$100, but credit the shareholder with a tax payment of \$34. Since the shareholder owes only \$28 in tax on \$100 of income, traditional proposals typically provide that the shareholder is entitled to a \$6 refund or credit against other taxes.

Assuring that corporate income is taxed once, but only once, does not require that corporate income be taxed at individual rates, however. Attaining a single level of tax—with the most significant efficiency gains we project from any system of integration—can be achieved with a schedular system in which all corporate income is taxed at a uniform rate at the corporate level without regard to the tax rate of the corporate shareholder. Under the current rate structure, in which the corporate rate is slightly higher than the maximum individual rate, there seems little reason to tax corporate income at shareholder rates. In contrast, an integration proposal developed in the late 1970s, when the maximum individual rate on capital income of 70 percent exceeded the corporate rate of 46 percent, might well have required taxation at shareholder rates in order to prevent avoidance of the higher shareholder rates.³⁵

Neutral taxation of capital income will reduce the distortions under the current system.³⁶ Economic efficiency suggests that all capital income should be taxed at the same rate. Accordingly, we place less emphasis than some advocates of integration on either trying to tax corporate

income at shareholder tax rates or on simply trying to eliminate one level of tax on distributed corporate income.

The prototypes advanced in this Report use the corporation not as a withholding agent for individual shareholders (which implies ultimate taxation at shareholder rates), but rather as a means of collecting a single level of tax on capital income at a uniform rate. Nevertheless, Chapter 3 discusses a shareholder allocation prototype, which closely resembles the traditional passthrough methods of integration. We do not recommend adopting shareholder allocation, but it illustrates the problems presented by an integration mechanism that imputes corporate income to shareholders and taxes it at individual rates.

A decision to adopt a schedular system for taxation of business capital is not irreversible. Future policymakers can, if they wish, add refund and crediting mechanisms to achieve the traditional objective of taxing corporate income at the individual shareholder's marginal rate, or they can address the issue by adjusting the corporate rate to more precisely approximate individual rates.³⁷ Our judgment is that neither of these courses is necessary to achieve the principal benefits of an integrated tax system. They are options that can be added once the complexities of transition have been mastered. Deferring them makes the integration prototypes examined in this Report simpler to implement and conserves revenues.

We approach integration primarily as a means of reducing the distortions of the classical system and improving economic efficiency. This Report's emphasis on enhancing neutrality in the taxation of capital income can be summarized in four goals for the design of an integrated tax system:

- Integration should make more uniform the taxation of investment across sectors of the economy. The U.S. corporate system discourages investment in the corporate sector relative to investment in the noncorporate sector and owner-occupied housing.

That is, current law results in too little capital in the corporate sector relative to that elsewhere in the economy. Integration seeks to reduce this distortion.

- Integration should make more uniform the taxation of returns earned on alternative financial instruments, particularly debt and equity. The U.S. corporate tax system discourages corporations from financing investments with equity as opposed to debt. Such a system violates the goal of neutral taxation. Although equalizing the tax treatment of debt and equity need not be the overriding goal of integration, equal treatment follows from the goal of attaining neutral taxation of capital income.
- Integration should distort as little as possible the choice between retaining and distributing earnings. The U.S. corporate system discourages the payment of dividends and encourages corporations to retain earnings or to make nondividend distributions.
- Integration should create a system that taxes capital income once. Imposing double or triple taxation on some forms of capital income while not taxing others violates the objective of achieving neutrality between corporate and noncorporate forms of investment.

Integration is not a cure-all. Even an integrated system cannot attain complete neutrality with respect to the taxation of capital income. One reason is that integration fails to address an important category of tax distortions: distortions in allocating investment capital among assets. These inter-asset distortions are important, and reducing such distortions was an important impetus and goal of the 1986 Act. Because a corporate income tax per se does not cause inter-asset distortions, this Report does not directly address them.³⁸

The integration prototypes analyzed in this Report are income tax systems. The Report does not consider non-income tax reform of corporate taxation. For example, some economists have advocated a corporate cash-flow tax.³⁹ In 1984, the Department of the Treasury rejected substitution of a consumption-based tax for the income tax,⁴⁰ and in the 1986 Act, Congress moved decisively

in the direction of strengthening the individual income tax. So long as the individual tax base is income, we do not believe a corporate cash-flow tax would enhance the neutral treatment of capital income relative to the reforms discussed here.

Revenue concerns also may prevent integration from fully equalizing the taxation of alternative investments. Some integration proposals would reduce government revenue from income taxes. Lost tax revenue must be made up either by increasing other taxes or by reducing government spending. Replacement taxes may create distortions and alter the distribution of tax burdens. See Chapter 13.

Finally, integration does not directly address the general question of whether the overall tax rate on capital income, and hence the overall cost of capital, is too high. If integration eliminates double taxation of corporate source income, the overall tax rate on capital income would fall, other things being the same. Integration must be financed, however, and taxes on other types of capital income might rise. Thus, integration primarily focuses on improving the allocation of the Nation's capital stock, but not necessarily on reducing the overall tax rate on capital income. As Chapter 13 documents, the benefits associated with such improvements are nonetheless substantial.

PART II: PROTOTYPES

INTRODUCTION

This Part presents three prototypes for implementing integration in the United States: (1) a dividend exclusion prototype, (2) a shareholder allocation prototype, and (3) the Comprehensive Business Income Tax (CBIT) prototype.¹

Our trading partners that have integrated their corporate tax systems, including most European countries, as well as Canada and Australia, have all adopted distribution-related integration systems. Such integrated systems retain a separate corporate level tax on undistributed earnings but eliminate part or all of the corporate level tax on corporate earnings distributed to shareholders as dividends. Distribution-related integration can be accomplished by excluding dividends from shareholders' income (a dividend exclusion system), by allowing shareholders a credit for corporate level taxes (an imputation credit system), or by allowing corporations a deduction for dividends (a dividend deduction system).

After considering each of these three alternatives, we determined that a dividend exclusion system would implement in a relatively simple and straightforward manner our policy recommendations. The flexibility of an imputation credit system in responding to important policy issues, such as the treatment of tax preferences, foreign taxes, and tax-exempt and foreign shareholders under integration, does not, in our view, outweigh its complexity in implementation. A dividend deduction system would produce results in many cases contrary to our policy recommendations. Chapter 2 outlines a dividend exclusion prototype, and Chapters 11 and 12 discuss the imputation credit and dividend deduction alternatives. Because an imputation credit system is the mechanism of corporate tax integration most frequently used abroad, we discuss an imputation credit prototype in considerable detail in Chapter 11.²

The Report also examines two integration systems that are not distribution-related.

Chapter 3 describes a shareholder allocation integration prototype, which would extend integration to retained earnings by taxing both distributed and retained corporate earnings at the shareholder's tax rate. Chapter 4 describes the CBIT prototype, which, in effect, would extend a dividend exclusion system to payments of interest in order to equalize the treatment of debt and equity and would tax corporate and noncorporate businesses in the same manner. This Report recommends the dividend exclusion prototype and CBIT for further study. While we do not recommend adopting the shareholder allocation prototype, we include it here to illustrate how a traditional full integration or passthrough model might be implemented and the problems it presents.

Each of these prototypes would move the U.S. tax system in the direction of more neutral taxation of corporate income and, in so doing, would reduce significantly tax-induced distortions in the allocation of capital. The prototypes generally are structured to implement our recommendations on four major issues:

- The benefit of corporate level tax preferences should not be extended to shareholders. Tax preferences, e.g., exempt state and local bond interest and accelerated depreciation, may reduce the corporate level tax, but current law does not extend corporate level tax preferences to shareholders. When corporate earnings sheltered by preferences are distributed to shareholders, they are currently taxed. Integration of the corporate income tax need not become an occasion for expanding the benefits of tax preferences. Therefore, we do not recommend extending corporate level tax preferences to shareholders under integration, and we have attempted to develop administrable rules to reach this result whenever we could do so in a manner compatible with the prototype. See Chapter 5.
- Integration should not reduce the total tax collected on corporate income allocable to tax-exempt investors. Under current law, tax-exempt organizations holding corporate stock, in fact, are not exempt from the corporate level tax imposed on corporate equity investments. Because corporate income is

subject to tax at the corporate level regardless of the exempt status of a shareholder, a tax-exempt organization is exempt only from the shareholder level tax. Integration presents the fundamental question whether under an integrated tax this treatment should continue, or whether integration should reduce the total taxes paid on corporate income allocable to tax-exempt entities. This Report recommends, in general, retaining the current level of taxation of corporate equity income allocable to tax-exempt shareholders. See Chapter 6. The CBIT prototype would introduce a corporate level tax on income allocable to tax-exempt bondholders as well. See Chapter 4.

- Integration should be extended to foreign shareholders only through treaty negotiations, not by statute. The United States generally imposes two levels of tax on foreign equity investment in U.S. corporations (inbound investment). Thus, the United States taxes the business profits of foreign owned domestic companies similarly to the profits of U.S. owned companies and also imposes significant withholding taxes on dividends paid to foreign investors. The basic issue that an integration proposal must resolve for inbound investment is whether, by statute, the United States should continue to collect two levels of tax on foreign owned corporate profits or whether foreign investors should receive benefits of integration similar to those received by domestic investors. This Report generally recommends that foreign shareholders not be granted integration benefits by statute, but

instead that this issue be addressed through treaty negotiations in order to achieve reciprocity. Most of the major trading partners of the United States that have adopted integrated corporate tax regimes have followed this approach. See Chapter 7 and Appendix B.

- Foreign taxes paid by U.S. corporations should not be treated, by statute, identically to taxes paid to the U.S. Government. The United States permits U.S. corporations to credit foreign taxes against U.S. taxes on foreign source income (outbound investment) but taxes shareholders on the distribution of such income without regard to the foreign taxes paid on that income. Treating foreign and U.S. corporate level taxes equally under an integrated system by statute would significantly reduce the current U.S. tax claim against foreign source corporate profits and often would completely exempt such profits from U.S. taxation at both the corporate and shareholder levels. Such unilateral action would result in a significant departure from the current allocation of tax revenues between the source and residence country. We therefore recommend that foreign taxes not be treated, by statute, the same as U.S. taxes. As a consequence, the prototypes generally would retain the foreign tax credit at the corporate level but would continue to tax foreign source income when it is distributed to shareholders. Extending the benefits of integration to foreign source income is more properly accomplished in the context of bilateral treaty negotiations. See Chapter 7.

CHAPTER 2: DIVIDEND EXCLUSION PROTOTYPE

2.A INTRODUCTION AND OVERVIEW OF PROTOTYPE

The dividend exclusion prototype set forth in this chapter would, with few changes in current law, implement many of this Report's key policy recommendations.¹ The principal advantage of the dividend exclusion prototype is its simplicity and relative ease of implementation. We considered an imputation credit prototype that would achieve results similar to the dividend exclusion prototype but at the cost of additional complexity, including an entirely new regime for taxing corporate distributions. Although we do not recommend an imputation credit system, such a system is described in Chapter 11 because it provides useful background for understanding the dividend exclusion prototype. A summary of the prototype follows.

Mechanics. Under the dividend exclusion prototype, corporations would continue to calculate their income under current law rules and pay tax at a 34 percent rate.² Shareholders receiving corporate distributions treated as dividends under current law, however, generally would exclude the dividends from gross income. The prototype requires corporations to keep an Excludable Distributions Account (EDA) to measure the amount of dividends that can be excluded by shareholders—essentially an amount on which corporate taxes have been paid. Thus, the dividend exclusion prototype would apply the corporate tax rate of 34 percent to both distributed and retained income but would eliminate the shareholder level tax on dividends paid from fully-taxed corporate income.³ All other distributions, e.g., interest and returns of capital, would be taxed in the same manner as under current law.

Tax-Exempt Shareholders. The dividend exclusion prototype would automatically retain the current level of taxation of corporate income earned on equity capital supplied by tax-exempt shareholders. Income from equity investments by tax-exempt organizations would be taxed at the corporate level under the current corporate tax

rules but, when distributed, would be exempt from tax at the shareholder level.⁴

Corporate Shareholders. A corporate shareholder would exclude from income excludable dividends received and would add the amount of such dividends to its EDA. The prototype retains the current dividends received deduction for taxable dividends.

Tax Preferences. The prototype retains the corporate tax preferences available under current law and the corporate alternative minimum tax. To avoid extending corporate tax preferences to shareholders, the prototype permits shareholders to exclude only those dividends deemed made out of income that has been taxed fully at the corporate level. Thus, corporate dividends paid to shareholders out of preference income would continue to be taxable as under current law. Mechanically, this is accomplished once the corporation's supply of fully-taxed income (as reflected in the EDA) is exhausted, by making additional dividends taxable to shareholders.⁵ See Section 2.B. As under current law, preference income distributed to tax-exempt shareholders would escape taxation at both the corporate and shareholder levels.

Foreign Source Income. The prototype retains the current foreign tax credit system, including the corporate level indirect foreign tax credit for taxes paid by foreign subsidiaries. The prototype, however, does not treat foreign taxes the same as U.S. taxes in determining the EDA, with the consequence that, as under current law, distributions of foreign earnings that have been shielded by the foreign tax credit at the corporate level are taxable to shareholders when distributed.⁶

Foreign Shareholders. The prototype retains the current 30 percent statutory withholding tax on dividends. In addition, it retains the branch profits tax on earnings considered repatriated from U.S. branches of foreign corporations. Thus, as under current law, inbound investment is subject to two levels of U.S. tax, with reductions in the

rate of withholding tax negotiated through tax treaties.⁷

Capital Gains and Share Repurchases. Chapter 8 discusses the treatment of capital gains on sales of corporate stock and the treatment of share repurchases.

Structural Issues. The dividend exclusion prototype does not require any major changes to current rules concerning the tax treatment of corporate acquisitions. Adopting the prototype does, however, require consideration of rules for the carryover or separation of corporation EDA balances in liquidations and tax-free corporate reorganizations.

Impact on Tax Distortions. Table 2.1 illustrates the impact of the dividend exclusion prototype on the three distortions integration seeks to address: the current law biases in favor of corporate debt over equity finance, corporate retentions over distributions, and the noncorporate over the corporate form. The only difference between the current law treatment of nonpreference, U.S. source business income and its treatment under the dividend exclusion prototype is the taxation of corporate equity income distributed to individuals. Since exclusion of dividends by individuals would remove the individual level tax, the total tax rate on distributed earnings would be reduced to the corporate rate (t_c , generally 34 percent), except for the influence of investor level taxes on foreign investors. This reduction would narrow (but not eliminate) the rate differential between distributed corporate and noncorporate equity income and between corporate equity income and interest. These reductions in differentials would help reduce the debt-over-corporate-equity-finance and noncorporate-over-corporate form distortions. The tax rate on undistributed corporate equity income would now be higher for individuals than the rate on distributed corporate equity income, so the tax bias against corporate distributions would likely be reversed, in the absence of a DRIP. See Chapter 9. For tax-exempt and foreign investors, there would be no change in the tax treatment of nonpreference, U.S. source business income. (The

tax bias against distributed earnings thus would remain for foreign investors.)⁸

2.B THE NEED FOR A LIMITATION ON EXCLUDABLE DIVIDENDS

In General

An exclusion from shareholder level tax for all dividends received not only would eliminate the

Table 2.1
Total U.S. Tax Rate on a Dollar of NonPreference, U.S. Source Income from a U.S. Business Under Current Law and the Dividend Exclusion Prototype

Type of Income	Current Law	Dividend Exclusion Prototype
I. Individual Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_i)t_i$	t_c
Undistributed	$t_c + (1 - t_i)t_g$	$t_c + (1 - t_i)t_g$
Noncorporate Equity	t_i	t_i
Interest	t_i	t_i
Rents and Royalties	t_i	t_i
II. Tax Exempt Entity is Income Recipient		
Corporate Equity:		
Distributed	t_c	t_c
Undistributed	t_c	t_c
Noncorporate Equity	t_c	t_c
Interest	0	0
Rents and Royalties	0	0
III. Foreign Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_{WD}$	$t_c + (1 - t_c)t_{WD}$
Undistributed	t_c	t_c
Noncorporate Equity	t_{WN}	t_{WN}
Interest	t_{WI}	t_{WI}
Rents and Royalties	t_{WR}	t_{WR}

Department of the Treasury
Office of Tax Policy

t_c = U.S. corporate income tax rate.

t_i = U.S. individual income tax rate.

t_g = U.S. effective individual tax rate on capital gains.

t_{WD} , t_{WN} , t_{WI} , t_{WR} = U.S. withholding rates on payments to foreigners of dividends, noncorporate equity income, business interest, and rents and royalties, respectively. Generally varies by recipient, type of income, and eligibility for treaty benefits and may be zero.

double tax on distributed corporate income, but also would eliminate the current shareholder level tax that serves as the only U.S. tax on distributed income that has been sheltered from corporate level tax by preferences and on distributed foreign source income that has borne only foreign taxes. To prevent the dividend exclusion system from extending preferences to shareholders and to ensure that foreign source income that has not borne U.S. tax at the corporate level is subject to tax at the shareholder level when distributed, the dividend exclusion prototype limits the amount of dividends that can be excluded at the corporate level to an amount that has been subject to U.S. tax at the corporate level. Thus, as under current law, corporate preference income would generally remain free of tax until distributed and, when distributed, would be taxed at shareholder rates. Foreign source income sheltered by foreign tax credits at the corporate level also would continue to be taxed when distributed to shareholders. See Chapters 5 and 7.

The prototype treats dividends as made first from a corporation's fully-taxed income, rather than from preference or foreign source income. Stacking dividends first against fully-taxed income should permit many corporations to continue their current dividend policy while paying excludable dividends. Even corporations with substantial preference or foreign source income can continue to pay dividends without incurring any additional corporate level tax, although the dividends would be taxable at the shareholder level. We considered, but rejected, the alternative of imposing a nonrefundable "compensatory tax" at the corporate level on distributions of preference or foreign source income.⁹ See Chapter 5. A nonrefundable compensatory tax not only reduces cash available to pay dividends but also increases the total tax burden on dividends paid to tax-exempt and foreign shareholders as well as to any shareholder taxed at less than a 34 percent rate; on the other hand, imposition of such a tax would permit uniform dividend exclusion. On balance, concern that a compensatory tax would distort the dividend decisions of corporations, particularly those with large numbers of tax-exempt or foreign shareholders, by requiring them to pay an extra tax to

maintain their current dividend policy, led us to the alternative described here. Section 11.B discusses a compensatory tax in more detail.

The prototype retains the corporate alternative minimum tax (AMT), which functions, as under current law, to curb the excessive use of tax preferences at the corporate level. The prototype treats AMT as taxes paid for purposes of determining the corporation's supply of fully-taxed income, but effectively converts income taxed at the 20 percent corporate AMT rate to a smaller amount of income taxed at the regular 34 percent rate.¹⁰

Identifying Distributed Preference Income: the EDA

To determine whether dividends are paid out of fully-taxed income or preference income, the prototype requires corporations to maintain an Excludable Distributions Account (EDA). Amounts included in the EDA are considered "fully-taxed income." Dividends paid are stacked first against fully-taxed income.

As a mechanical matter, the EDA measures a corporation's supply of fully-taxed income based on the taxes actually paid by the corporation. The corporation simply tracks actual corporate taxes paid and then converts that amount into an equivalent amount of after-tax income taxed at a 34 percent rate, using the following formula:

Annual additions to EDA =

$$\left[\frac{\text{U.S. tax paid for taxable year}}{.34} - \text{U.S. tax paid for taxable year} \right] \\ + \text{excludable dividends received}$$

Thus, for each \$34 of taxes paid (whether regular corporate tax or AMT), the corporation may pay \$66 of excludable dividends, i.e., each \$1 of corporate taxes paid supports \$1.94 of excludable dividends or each dollar of excludable dividends must be supported by at least \$0.52 of corporate taxes paid.¹¹ The effect of calculating additions to the EDA at 34 percent is to ensure that distributed income has been taxed at the full corporate rate, even though, if taxable to shareholders, the

dividend would be taxed, at most, at the 31 percent maximum individual rate.

The EDA increases when a corporation pays taxes (including estimated taxes) or, as described under "Corporate Shareholders" below, receives an excludable dividend from another corporation. The EDA decreases when a corporation pays a dividend or receives a refund of taxes paid. Dividends paid when the EDA has been reduced to zero are treated as paid from preference income and are fully includable in shareholder's income.

Example. A corporation with a zero initial EDA balance earns \$75 of taxable income and \$25 of exempt income. The corporation pays \$25.50 of corporate tax and has \$74.50 available for distribution to shareholders. The \$25.50 of tax supports the addition of \$49.50 to the corporation's EDA ($\$25.50 / .34 - \25.50). If the corporation actually distributes \$74.50, only \$49.50 of the dividend is excludable, because the EDA balance is \$49.50. The remaining \$25 represents a distribution of preference income that is fully subject to tax at the shareholder level.

The prototype requires corporations to report annually to shareholders and the IRS the excludable and taxable portions of dividends. In the preceding example, the corporation would report the first \$49.50 distributed as an excludable dividend and the next \$25 distributed as a taxable dividend. Shareholders would include taxable dividends in income as under current law. Corporations also would report to the IRS annually the adjustments to and balance in the EDA.

Adjustments to a corporation's tax liability for a prior year are reflected as adjustments to the corporation's EDA in the current year. Making audit adjustments to the EDA in the current year avoids the problem of recharacterizing dividends paid in prior years.¹² An increase in a prior year's tax liability increases the EDA in the year the adjustment is made and the additional tax is paid, and a decrease in a prior year's tax liability, e.g., through carryback of a net operating loss, gives rise to a refund and requires a corresponding reduction in the EDA in the year the refund is received. Refunds would be limited to the balance

in the corporation's EDA.¹³ Refunds in excess of the EDA balance would be carried forward to be applied against future corporate taxes. Similarly, an NOL carryback would not be permitted to reduce the EDA below zero; losses in excess of this amount would be carried forward.¹⁴

Corporate Shareholders

Current law limits the imposition of multiple levels of corporate taxation by permitting corporate shareholders to deduct some or all of their dividends received from domestic corporations, depending on the degree of affiliation with the distributing corporation.

Under the prototype, distributions from an EDA are excludable from the income of any shareholder, including a corporate shareholder. The recipient corporation adds the amount of excludable dividends it receives to its EDA. This prevents the imposition of a second level of tax when excludable dividends are redistributed to the shareholders of the recipient corporation.

The prototype retains current law for taxable dividends (dividends in excess of the distributing corporation's EDA) received by corporations. Thus, taxable dividends received from a U.S. corporation (and a portion of dividends from certain foreign corporations engaged in business in the United States) would entitle the recipient to a dividends received deduction (DRD). A recipient corporation allowed only a 70 or 80 percent DRD would pay tax on the remainder of the dividend. Any taxes paid on the dividend would be added to the EDA, determined in accordance with the general formula for computing additions to the EDA set forth above. To the extent the recipient corporation qualifies for the DRD, the prototype defers the investor level tax on preference income until it is ultimately distributed to individual shareholders.¹⁵

Anti-abuse Rules

We have considered whether special rules are necessary to limit a corporation's ability to target (or "stream") excludable dividends to taxable

shareholders and otherwise taxable dividends to tax-exempt shareholders. Streaming undercuts the prototype's preservation of the current level of taxation of corporate equity income paid to tax-exempt and foreign shareholders by denying refunds of corporate taxes paid. On the other hand, tax-exempt and foreign investors may enter into a variety of ordinary business structures that enable them to receive income not taxed at the corporate level, e.g., by holding debt instead of equity.¹⁶ These arrangements are permitted under current law, and they are not limited under the prototype. The ability to arrange a capital structure to minimize taxes emphasizes the point that eliminating the double tax on dividends will not, by itself, eliminate the tax system's current bias in favor of debt financing. A more comprehensive approach such as CBIT (described in Chapter 4) is required to address this systemic bias.

In the dividend exclusion prototype, concerns about streaming are balanced against the cost of complexity by restricting only a limited class of streaming transactions. In the prototype, current law rules that apply in analogous situations are extended.¹⁷ First, the prototype adopts a 45 day holding period requirement for dividends to be excludable to prevent tax-exempt shareholders from routinely selling stock to taxable shareholders just before payment of an excludable dividend and then repurchasing the stock.¹⁸ Second, depending on the treatment of capital gains, the prototype could extend application of the extraordinary dividend rules of IRC § 1059 to excludable dividends in order to prevent taxable shareholders from "stripping" excludable dividends.¹⁹ The existing rules of IRC § 305 also may be useful in preventing other kinds of streaming.²⁰

Rules like those of IRC §§ 382 through 384, which limit the use of net operating losses and other corporate attributes after a change in ownership, are not included in the prototype. An EDA balance represents fully-taxed corporate income, and, in general, integration should prevent that income from being taxed again at the shareholder level. The issue is difficult, however, because allowing unlimited use of EDA balances may

permit an acquiror to use a target's EDA balance to defer or eliminate tax on the acquiror's preference income.²¹ On balance, we decided that extending the rules would create considerable complexity and may not provide any substantial benefit in addition to the rules discussed above.²² If significant evidence of abuse develops, ownership change limitation rules could be adopted at that time.²³

Policymakers may wish to consider whether interest expense paid on debt incurred to purchase corporate stock should be disallowed under rules like those of IRC § 265(a). In a dividend exclusion system, corporate earnings generally bear only one level of tax. See the example in Section 4.G.²⁴ While the potential for rate arbitrage exists under current law, it may be less of a problem where only one of two levels of tax is eliminated. The issue is a difficult one, however, because disallowing an interest deduction for interest paid to a taxable lender will result in the imposition of two levels of tax. Moreover, in CBIT, we recommend extending the interest disallowance rules with respect to CBIT debt and equity. See Section 4.G. There may be less pressure to adopt the same rule in the dividend exclusion prototype, however, because it does not equate the treatment of debt and equity.²⁵

2.C FOREIGN SOURCE INCOME

Under the prototype, U.S. individual shareholders would continue to include in income dividends received from foreign corporations and to claim a foreign tax credit for any foreign withholding taxes imposed on the dividend. Similarly, U.S. corporate shareholders owning less than 10 percent of a foreign corporation's voting stock (the threshold requirement for the U.S. corporation being eligible to claim an indirect foreign tax credit under IRC § 902) would include in income dividends from the foreign corporation and would claim a foreign tax credit for foreign withholding taxes. The corporate shareholder would not add any amount to its EDA to reflect foreign income taxes paid by the foreign corporation or foreign withholding taxes on dividends.

U.S. corporate shareholders owning at least 10 percent of a foreign corporation's voting stock would continue to include in income dividends from the foreign corporation and to claim both a direct credit for foreign withholding taxes and an indirect foreign tax credit with respect to such dividends under the rules of IRC § 902 of current law, subject to the foreign tax credit limitation in IRC § 904. Under these provisions, the corporate shareholder receives a credit, subject to certain limitations, for foreign income taxes paid by the foreign corporation with respect to earnings out of which the dividends are paid. A U.S. corporation would increase its EDA only by an amount that reflects the residual U.S. tax (if any) imposed on the dividend income. Thus, absent any residual U.S. tax (and any EDA balance attributable to U.S. tax on U.S. source income), distributions out of foreign source income taxed abroad, in effect, would be taxed at the shareholder level as under present law.

U.S. corporations with foreign branch operations, or which receive interest, rents, royalties, or other income from foreign sources, would continue to be subject to current U.S. tax on their foreign source income with a credit under IRC § 901 for foreign income taxes. As with earnings of foreign subsidiaries, the U.S. corporation would increase its EDA only to reflect the amount of any residual U.S. tax imposed on the foreign source income.

Although we do not recommend a statutory rule permitting additions to an EDA based on payment of foreign taxes, consideration might be given to granting authority to enter into tax treaties that treat foreign taxes like U.S. taxes, where reciprocity exists.²⁶ Treating foreign taxes like U.S. taxes would allow a U.S. corporation doing business in a treaty jurisdiction to pay excludable dividends to its U.S. shareholders even if its income was entirely shielded from U.S. tax by foreign tax credits.²⁷

2.D LOW-BRACKET SHAREHOLDERS

Taxing corporate income at a uniform rate at the corporate level significantly reduces the complexity of the dividend exclusion (and CBIT) prototypes and reduces the burdens of transition to a new system because refund and credit provisions are not required to deal with "overcollections" of tax from individual taxpayers with marginal rates lower than the 34 percent corporate rate. While this simplification concern has been a major factor in our decision to recommend a schedular system, inspection of the available data also suggests that the adoption of a schedular system will not result in significantly higher taxation of corporate income than the use of individual rates for most taxable shareholders. The data indicate that approximately two-thirds of corporate dividends paid to taxable individual shareholders, i.e., shareholders who are U.S. citizens or residents, are paid to individuals with average marginal tax rates of more than 25 percent.

It might at first appear that corporate income distributed to individuals with average marginal tax rates of less than 25 percent should be taxed at a lower rate, because a lower marginal rate indicates a lower income and, inferentially, less ability to pay. On the other hand, low-bracket shareholders who receive dividends clearly own some property, i.e., stock, and it is not clear whether their low taxable incomes accurately reflect their ability to pay.²⁸ Accordingly, the dividend exclusion and CBIT prototypes do not contain provisions reducing the rate of tax collected on corporate income distributed to low-bracket shareholders.

If policymakers desired to tax distributed corporate income at shareholder rates, a dividend exclusion system could allow a tax credit that would refund all or part of the excess tax collected at the corporate level. To refund fully the

difference between 34 percent and the shareholder rate, the amount of the tax credit would equal (1) the amount of the dividend received, grossed up at the 34 percent rate, multiplied by (2) the difference between 34 percent and the shareholder's marginal tax rate. Each shareholder would calculate his own credit based on a formula (or a set of tables) and his marginal tax rate.²⁹

Example. A corporation earns \$100, pays tax of \$34, and distributes \$66 to a shareholder in the 15 percent marginal tax bracket. The shareholder would owe no tax on the dividend and would be allowed a tax credit of \$19 $((\$66/.66) \times (.34 - .15))$, which could be used to offset other income.

Such credits would be allowed only for excludable dividends.³⁰ Allowing a shareholder tax credit for taxable dividends (dividends considered made out of preference income) would confer a shareholder level benefit for corporate level tax that had not been paid.

2.E INDIVIDUAL ALTERNATIVE MINIMUM TAX

Historically, individuals have been subject to a minimum tax to ensure that at least a small amount of tax is paid on an individual's economic income and to respond to public perceptions that permitting high-income individuals to pay little or no income tax undermines the fairness of the tax system. The exclusion for dividends described here might result in some high-income individuals paying little or no tax at the individual level, thus raising issues of public perception. The EDA, however, operates to ensure that any dividends excludable from an individual's gross income have already been subject to one level of tax at the corporate level. The investor's income tax has been prepaid at the corporate level at the 34 percent corporate rate, which exceeds the top individual rate. Including excludable dividends in the individual AMT would serve only to re-institute a double tax on dividends and would

undermine to some extent the basic goals of this system of integration.

2.F STRUCTURAL ISSUES

This section discusses several areas of current law that should be modified to reflect adoption of the dividend exclusion prototype. This section does not provide a comprehensive analysis of the technical changes required but instead raises issues for further development.

Corporate Acquisitions

The dividend exclusion prototype retains the basic rules governing the treatment of taxable and tax-free corporate asset and stock acquisitions. The prototype permits taxable asset acquisitions to be made with only a single level of tax. Corporate tax paid on gain recognized on the sale of assets would be treated like any other corporate level tax payment and would support a corresponding addition to the EDA, thus generally allowing a tax-free distribution of proceeds to shareholders when the corporation liquidates. Upon liquidation, shareholders would, as under current law, generally recognize gain to the extent liquidation proceeds exceed share basis. A shareholder's gain would be excludable, however, to the extent of a proportionate share of the liquidating corporation's EDA.³¹ Stock acquisitions may face a higher tax burden than asset acquisitions if capital gains on corporate stock that are attributable to retained earnings are taxed in full at shareholder rates. See Chapter 8.

The prototype retains current law rules that treat a qualifying corporate reorganization as tax-free at the corporate level (with the target's tax attributes, including its asset bases, carrying over to the acquiror) and at the shareholder level.³² Additional rules would be needed to coordinate the reorganization provisions with the dividend exclusion prototype. For example, the EDA of a corporation acquired in a reorganization should

generally carry over to its successor. In a divisive reorganization, the EDA should be divided proportionately between the corporations.³³

Earnings and Profits

The prototype retains the current law rules that treat a distribution as a dividend only to the extent of current and accumulated earnings and profits.³⁴ Distributions that exceed earnings and profits are treated as a return of capital to the extent of a shareholder's basis and then as gain on the disposition of the stock.³⁵ Under the prototype, only a distribution that is made out of the corporation's EDA is eligible for exclusion at the shareholder level. If a distribution is made when a corporation has no EDA balance but has earnings and profits, it is a taxable dividend; if the corporation has no earnings and profits, the distribution is treated as a return of capital to the extent of the shareholder's basis and then as gain.

Some commentators have argued that the earnings and profits rules should be eliminated under current law, essentially arguing that the complexity of the earnings and profits rules outweigh any benefits that may result.³⁶ In general, at least two alternatives to the earnings and profits rules are possible. All nonliquidating distributions to shareholders could be treated as dividends, except where a distribution results in a reduction in capital (stated or surplus) for corporate law purposes. Alternatively, all nonliquidating distributions to shareholders could be treated as dividends, subject generally to current rules allowing basis recovery with respect to transactions where a shareholder's interest in the corporation is reduced or terminated.

Under the dividend exclusion prototype, as under current law, replacing the earnings and profits rules with either of the alternative rules would simplify the determination of whether a corporate distribution is a dividend for tax purposes.³⁷ However, although the simplification benefits of eliminating the earnings and profits rules are important, we conclude that adoption of the dividend exclusion prototype, by itself, neither

compels the elimination of the rules nor demands their retention.³⁸ Thus, under the dividend exclusion prototype, earnings and profits would continue to provide a rough measure of whether, for purposes of determining the shareholder level tax, a distribution represents income from, or a return of, a shareholder's investment.³⁹

Dividend Reinvestment Plans (DRIPs)

Distributed earnings are subject to only one level of tax under the dividend exclusion prototype, but retained earnings may be subject to a greater tax burden to the extent that they increase the value of stock and are taxed as capital gains. See Chapter 8. A dividend reinvestment plan, or DRIP, is one way for corporations to extend the benefits of integration to retained earnings. In a dividend exclusion system, a DRIP would allow a corporation to treat its shareholders as if they had received an excludable cash dividend and had reinvested it in the corporation. The shareholder's basis would be increased to reflect the amount of the deemed dividend, ensuring that the shareholder would not be taxed on appreciation due to retained fully-taxed earnings when the stock is sold.

Example. A corporation earns \$100, pays \$34 in tax, and adds \$66 to its EDA. The corporation declares a deemed dividend of \$66 and reduces the EDA by \$66, and the shareholders increase their share basis by \$66.

Chapter 9 discusses DRIPs.

2.G PENSION FUNDS

Under current law, contributions to qualified pension plans are generally deductible by the employer and are not currently includable by the employee. The employee is generally taxed only when distributions of benefits are made. The deduction provided to the employer combined with the deferral of income to the employee until benefits are paid effectively exempts the investment earnings on the contribution from tax.⁴⁰ Thus, pension fund income from investments in stock bear only one level of tax—the corporate tax paid by the corporation.

The dividend exclusion prototype does not change this treatment. Under the prototype, most dividends are excludable by shareholders. Thus, if dividends were received directly by plan beneficiaries, they would be tax-free. The earnings of pension plans would be taxed when distributed, however, even if the distributions were attributable to excludable dividends received by the plan on its investments. Just as under current law,

however, the combination of the employer's deduction for contributions and the deferral of the beneficiary tax until earnings are distributed ensures that earnings on pension fund investments in stock are taxed only once. Although retaining the current treatment of pension funds in a dividend exclusion system perpetuates some bias against investments in stock by pension plans, the disincentive is no greater than under current law.

CHAPTER 3: SHAREHOLDER ALLOCATION PROTOTYPE

3.A INTRODUCTION

The dividend exclusion prototype and other distribution-related systems of integration provide relief from double taxation only for distributed income. As a consequence, they may create an incentive for corporations to distribute, rather than retain, earnings at least to the extent that fully-taxed income can be distributed to taxable shareholders.¹ In contrast, the shareholder allocation prototype would extend integration to retained earnings by allocating a corporation's income among its shareholders as the income is earned. Shareholders would include allocated amounts in income, with a credit for corporate taxes paid, and would increase the basis in their shares by the amount of income allocated, less the amount of the credit. Distributions would be treated as a return of capital to the extent of a shareholder's basis and, thereafter, as a capital gain.²

Thus, the shareholder allocation prototype treats retained and distributed earnings equally. We do not favor adopting the shareholder allocation prototype, however, because of the policy results and administrative complexities it produces. As examples of policy problems, if it is to retain parity between retained and distributed earnings, the shareholder allocation prototype must extend tax preferences to shareholders and exempt from U.S. tax foreign source income that has borne no U.S. tax. While the shareholder allocation prototype reduces (but does not eliminate) current law's bias in favor of debt financing, the same is true of the dividend exclusion prototype, which is a simpler regime.³ Administratively, shareholder allocation integration would require corporations and shareholders to amend governing instruments for outstanding corporate stock to provide for income allocations, would require corporations to maintain capital accounts similar to those used under the partnership rules, and could create significant reporting difficulties for shareholders who sell stock during a year and for corporations that own stock.

We nevertheless discuss the shareholder allocation prototype in some detail because it is the integration system advanced by advocates of traditional full integration proposals, which generally would treat a corporation as a conduit and allocate income to shareholders as earned. This chapter shows how a passthrough model of integration might be modified to conform as closely as possible with our policy recommendations and identifies some of the most difficult administrative issues.⁴

In contrast to a pure passthrough model of integration, the shareholder allocation prototype (1) does not pass through losses to shareholders, (2) retains the corporate level tax, which would assume a function similar to a withholding of shareholder level tax, (3) requires corporations to report to shareholders only an aggregate income amount, rather than separately report all items, and (4) does not extend integration benefits to tax-exempt shareholders or to foreign shareholders except by treaty.

3.B OVERVIEW OF THE SHAREHOLDER ALLOCATION PROTOTYPE

The shareholder allocation prototype continues to treat the corporation as a separate entity for many reporting and auditing purposes. All tax items, including different types of income, deductions, losses and credits, are aggregated at the corporate level rather than being passed through to shareholders. To enhance compliance and mitigate shareholder cash flow problems, the prototype requires the corporation to pay income taxes at regular corporate rates as under current law. The corporation allocates its taxable income, as reported for regular tax purposes, among its shareholders. The shareholders include the allocated amounts in income and credit corporate taxes paid and corporate tax credits claimed (including the foreign tax credit and other corporate tax credits) against their tax liability. Shareholders

with marginal tax rates less than the corporate rate may use excess credits to offset tax liability on other income but may not obtain refund of the credit.

Example. A corporation has \$100 of taxable income and owes \$31 of corporate level tax.⁵ The corporation also is entitled to a tax credit (e.g., a low-income housing credit) of \$5. Thus, the corporation pays \$26 in tax. The corporation allocates \$100 of taxable income among its shareholders, together with \$31 of tax credits (\$26 tax actually paid plus \$5 tax credit).⁶

Shareholders would increase share basis by (1) the amount of taxable income allocated to them, after subtracting corporate taxes paid (including corporate tax credits),⁷ and (2) tax-exempt income. See Section 3.E. Thus, in the examples noted above, the shareholders' collective basis increases by \$69. Share basis would decrease by the amount of distributions. Distributions to shareholders are treated as a nontaxable return of capital to the extent of a shareholder's basis in his stock. Distributions in excess of basis would be treated as gain recognized on the sale of the stock, which would generally be capital gain.⁸

Corporate losses and excess corporate tax credits would not flow through to shareholders but could be carried forward at the corporate level. Losses or excess tax credits could not be carried back to claim a refund of corporate tax, because that tax would already have been made available to offset shareholder tax on allocated income.⁹ Current law limitations on the use and transfer of corporate losses and other tax attributes would continue to apply at the entity level.

Mechanics. Corporations would allocate income and taxes paid to the holder of stock on a quarterly record date. A corporation with multiple classes of stock would allocate tax items in accordance with the terms of the stock certificate, which would designate the share of income to be allocated to each class of stock. See Section 3.F. A U.S. corporate shareholder would allocate to its own shareholders its share of the second corporation's taxable income and tax credits.

Intercompany holdings may create difficult reporting issues. See Section 3.H.

The mechanics of shareholder allocation integration can be illustrated with a simple example.

Example. A corporation has three classes of common stock, the terms of which provide for the allocation of 30 percent of corporate income to Class A, 20 percent to Class B, and 50 percent to Class C. The corporation has taxable income of \$100, pays \$31 in corporate tax and pays a \$10 dividend with respect to Class C stock. The shareholder integration prototype allocates the income and the credit to each class of stock based on the respective percentages (so, for example, Class C would be allocated income of \$50 and credits of \$15.50). Within each class of stock, each share receives a pro rata amount.¹⁰ Holders of Class A stock would collectively increase their basis by \$20.70 ($.30 \times (\$100 - \$31)$), holders of Class B stock would increase their basis by \$13.80 ($0.20 \times (\$100 - \$31)$), and holders of Class C stock would collectively increase their basis by \$24.50 ($.5 \times (\$100 - \$31) - \10).

Tax-Exempt Shareholders. To preserve one level of tax on corporate income allocable to tax-exempt shareholders, credits for corporate tax would not be refundable to tax-exempt shareholders. See Section 3.I.

Tax Preferences. The shareholder allocation prototype would generally extend corporate level tax preferences to shareholders. See Section 3.E.

Foreign Source Income and Foreign Shareholders. A U.S. corporation would pay corporate tax on its worldwide income and, where permitted under current law, could claim a foreign tax credit for foreign taxes paid directly and by a foreign subsidiary. The corporation would then allocate its taxable income to shareholders and the foreign tax credit would be creditable by shareholders. Section 3.I discusses the difficulty of implementing appropriate shareholder level foreign tax credit limitation rules. Income of a foreign corporation would be includable in income of U.S. corporate shareholders only as under

current law, i.e., generally when distributed. The shareholder allocation prototype does not permit foreign shareholders, except pursuant to tax treaties, to claim a refund of the corporate tax or to use the credit for corporate tax to offset the 30 percent (or lower) withholding tax levied on dividends (which would continue to apply). Such treaty benefits should be provided only in return for reciprocal benefits.

Capital Gains and Share Repurchases. Chapter 8 discusses the treatment of capital gains on sales of corporate stock and the treatment of share repurchases.

Structural Issues. Section 3.G discusses the problems of midyear sales of stock, and Section 3.H discusses the reporting difficulties that arise in the case of intercorporate stock ownership. We do not discuss further the treatment of corporate taxable and tax-free acquisitions under the shareholder allocation prototype.

Impact on Tax Distortions. Table 3.1 illustrates the impact of the shareholder allocation prototype on the three distortions integration seeks to address: the current law biases in favor of corporate debt over equity finance, corporate retentions over distributions, and the noncorporate over the corporate form. For nonpreference, U.S. source income received by individuals, the shareholder allocation prototype is fully successful. All forms of income are taxed at the individual rate (t_i , which can range from zero to 31 percent). Equalization of the tax rate across all sources of income for individuals means that shareholder allocation reduces all three current law distortions. For tax-exempt and foreign investors, however, the shareholder allocation prototype makes no change in the current taxation of nonpreference, U.S. source income.

3.C CORPORATE LEVEL PAYMENT OF TAX

In theory, corporate level payment of tax is not an essential feature of shareholder allocation integration.¹¹ Shareholders could have the sole responsibility for payment of taxes on corporate

level earnings, including retained earnings. Under such a system, corporations would report income to shareholders, who would include their allocable share of corporate income with other income on their returns and pay tax on their total income. Partnerships and S corporations follow this approach under current law. However, because tax is more likely to be collected if paid at the corporate level, the shareholder allocation prototype retains the current system requiring payment at the corporate level and then allocates to shareholders the corporation's taxable income and taxes paid.

Table 3.1
Total U.S. Tax Rate on a Dollar of NonPreference, U.S. Source Income from a U.S. Business Under Current Law and the Shareholder Allocation Prototype

Type of Income	Current Law	Shareholder Allocation Integration
I. Individual Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_i$	t_i
Undistributed	$t_c + (1 - t_c)t_g$	t_i
Noncorporate Equity	t_i	t_i
Interest	t_i	t_i
Rents and Royalties	t_i	t_i
II. Tax Exempt Entity is Income Recipient		
Corporate Equity:		
Distributed	t_c	t_c
Undistributed	t_c	t_c
Noncorporate Equity	t_c	t_c
Interest	0	0
Rents and Royalties	0	0
III. Foreign Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_{WD}$	$t_c + (1 - t_c)t_{WD}$
Undistributed	t_c	t_c
Noncorporate Equity	t_{WN}	t_{WN}
Interest	t_{WI}	t_{WI}
Rents and Royalties	t_{WR}	t_{WR}

Department of the Treasury
Office of Tax Policy

t_c = U.S. corporate income tax rate.

t_i = U.S. individual income tax rate.

t_g = U.S. effective individual tax rate on capital gains.

t_{WD} , t_{WN} , t_{WI} , t_{WR} = U.S. withholding rates on payments to foreigners of dividends, noncorporate equity income, business interest, and rents and royalties, respectively. Generally varies by recipient, type of income, and eligibility for treaty benefits and may be zero.

In addition to increasing compliance, retaining corporate level payment of tax provides a mechanism for imposing tax on corporate income allocable to tax-exempt and foreign shareholders. Denying refundability of credits for corporate level tax to tax-exempt shareholders, in effect, preserves current law, which taxes corporate equity income allocable to tax-exempt shareholders at the corporate level. Nonrefundability of credits also preserves current law for foreign shareholders. See Section 3.I.

3.D PASSTHROUGH OF CORPORATE LOSSES TO SHAREHOLDERS

While it would be possible to pass through to shareholders aggregate net losses incurred at the corporate level, the prototype does not do so.¹² Passthrough of corporate losses would raise a host of fundamental policy, technical, and administrative issues. For example, one issue is whether, as for partnerships (but generally not S corporations), shareholders would be permitted to include entity level debt in their basis to determine the extent to which losses could be passed through. A second issue is whether the current at-risk and passive activity rules would apply at the shareholder level to limit the use of losses incurred by corporations. Failure to apply these rules could allow taxpayers to use corporations as tax shelters and to circumvent current restrictions applicable to partnerships and S corporations. Passthrough of corporate losses also would create significant administrative complexity. Even small shareholders would have to track losses allocated to them, including losses in excess of basis carried forward from previous years, and would have to apply the at-risk rules and the passive activity loss rules.

To avoid the complexity created by applying additional loss limitations at the shareholder level and the need for anti-abuse rules, the shareholder allocation prototype denies passthrough of corporate losses to shareholders. Instead, corporate losses may be carried forward and used to offset corporate income in later years. This allows a reasonable degree of accuracy in measuring

corporate income over time while minimizing complexity and opportunities for abuse.

3.E TAX TREATMENT OF PREFERENCES

Integration generally does not require extending the benefits of corporate level tax preferences to shareholders. Extending preferences to shareholders under integration would increase the value of corporate preferences relative to current law and would raise the revenue cost of integration. See Chapter 5. Accordingly, the dividend exclusion and CBIT prototypes are structured not to extend preferences to shareholders. See Section 2.B and Section 4.D.

In contrast, the shareholder allocation prototype generally extends preferences to shareholders. While we considered modifying the shareholder allocation prototype in order not to extend preferences to shareholders, we found such modifications to be difficult and inconsistent with the passthrough nature of the prototype. Eliminating preferences by including preference income in shareholder income as earned would treat corporate preference income more harshly than under current law.¹³ Current law generally taxes corporate preference income at the shareholder level only when the income is distributed or stock is sold. While shareholder allocation could be modified to tax preference income only when distributed, doing so would effectively convert shareholder allocation into distribution-related integration, for which less cumbersome structures can be used.¹⁴

For these reasons, the shareholder allocation prototype generally passes through preferences to shareholders, but that feature is a major reason we do not favor the adoption of shareholder allocation. If policymakers were to adopt the shareholder allocation prototype, serious consideration should be given to restricting the preference items available to corporations.

The extent to which the shareholder allocation prototype extends preferences to shareholders

depends on the type of preference. An exclusion preference, e.g., tax-exempt interest on state and local bonds, allows a corporation to earn economic income that is not included in taxable income and, thus, is not allocated to shareholders. The prototype provides a shareholder basis increase for tax-exempt income, similar to the basis increase provided under current partnership rules, which ensures that such income is not taxed to a shareholder who sells his stock or receives a distribution.¹⁵ If such a special basis increase were not provided, then preference income attributable to an exclusion preference would be taxable upon distribution or sale of stock.

A credit preference, e.g., the credit for increasing research activities, reduces corporate level taxes payable. The shareholder allocation prototype passes through a credit preference to shareholders (to the extent it is claimed by the corporation) by treating it as corporate taxes paid, which are creditable by shareholders. A basis reduction for the amounts of taxable income shielded from tax by credit preferences would make these amounts taxable either upon the sale of stock or receipt of distributions in excess of basis.

A deferral preference, e.g., accelerated depreciation, initially reduces corporate taxable income relative to corporate economic income. In later years, however, as the deferral preference turns around, the corporation's taxable income exceeds its economic income. Thus, because the shareholder allocation prototype allocates only taxable income to shareholders, a shareholder who holds stock throughout the deferral period generally benefits from a deferral preference to the same extent as the corporation. As under the partnership rules, however, a shareholder's basis increases only by the amount of taxable income (and tax-exempt income) allocated to him. Thus, a shareholder who sells stock or receives a distribution from the corporation may realize taxable gain because the shareholder's basis does not reflect the economic income that has been sheltered at the corporate level by a deferral preference.¹⁶ On the other hand, a distribution that does not

exceed basis before the deferral preference reverses will be treated as a return of basis. In such a case, the deferral preference will not be taxed to the shareholder until the stock is sold.

Certain features of shareholder allocation integration indirectly limit the flowthrough of preferences. Because the shareholder allocation prototype does not allow losses to flow through to shareholders, preferences are not passed through to the extent they create corporate losses. In addition, because corporate debt is not included in shareholder basis and inside basis in assets is not stepped up to reflect the price paid for corporate shares, there could be disparities between inside and outside basis that could limit the benefit to shareholders of corporate level preferences.

A final issue involving preferences is the treatment of the corporate alternative minimum tax (AMT). In general, the corporate AMT would be retained under integration to limit use of preferences at the corporate level. Accordingly, the dividend exclusion prototype and the CBIT prototype retain the corporate AMT. The shareholder allocation prototype does not retain the corporate AMT because we found no simple and administrable mechanism for doing so in the context of a passthrough system.

For example, the approach most consistent with the passthrough nature of the shareholder allocation prototype would continue to collect AMT at the corporate level, include corporate alternative minimum taxable income (AMTI) in shareholder AMTI, and credit corporate AMT against an individual's liability for regular tax and AMT.¹⁷ This approach would treat the corporate AMT as equivalent to a mechanism for withholding shareholder level AMT.¹⁸ However, the inclusion of corporate AMTI in shareholder AMTI would increase unacceptably the complexity of information reporting to shareholders and the calculation of shareholder tax. We considered but rejected as unworkable other solutions designed to confine the complexity of the AMT calculation to the corporate level.¹⁹

3.F ALLOCATING INCOME AMONG DIFFERENT CLASSES OF STOCK

Under the shareholder allocation prototype, once the corporation determines its taxable income and taxes paid, additional rules are needed to allocate that amount among different classes of shares. Both S corporations and partnerships must make such allocations under current law. However, neither of these models is appropriate for shareholder allocation integration. The S corporation rules, which are designed for corporations with a single class of stock and a limited number of shareholders, cannot readily be adapted to more complex capital structures.²⁰ The partnership allocation rules are sufficiently flexible, but generally are too complex, to apply to widely held corporations. Therefore, the shareholder allocation prototype adopts a modified version of the partnership approach.

Under current law, a partnership may allocate its income in any manner that has "substantial economic effect."²¹ Subject to this limitation, a partnership has great flexibility to allocate income and loss or particular items of income or deduction to particular partners. In general, an allocation of partnership taxable income or loss can have substantial economic effect only if such income or loss is allocated to the partner or partners that will receive the benefit or bear the burden of the economic consequences corresponding to the taxable income or loss. The economic consequences of partnership allocations are reflected in capital accounts maintained by the partnership in accordance with detailed regulations.²²

The shareholder allocation prototype approximates the basic approach of the partnership allocation method while reducing its complexity. It retains the principal economic advantage of the partnership system by permitting allocations of income to reflect varying economic rights among different classes of stock.

Under the shareholder allocation prototype, a corporation can allocate varying amounts of

income to different classes of stock, in accordance with the terms of the corporation's governing instruments. Within each class of stock, a corporation allocates every share a pro rata portion of the income and tax credits allocable to that class. A corporation could not allocate income separately from credits for taxes paid. Thus, while the corporation and shareholders may agree on the amount of income allocated to each class of stock, all income allocated carries a proportionate share of credits for corporate taxes paid. Allowing corporations to allocate income and credits disproportionately would allow corporations to allocate credits to taxable shareholders and income without credits to tax-exempt shareholders.

The shareholder allocation prototype simplifies the partnership model by (1) imputing to shareholders only a single amount of taxable income, (2) requiring that tax credits be allocated in proportion to income, and (3) not allocating corporate losses to shareholders. As a consequence, the prototype permits considerable flexibility in corporate capital arrangements but does not allow corporations to adopt the complex allocations possible under the partnership rules (which permit special allocations of items of income, deduction, and loss).

A substantial disadvantage is that this approach requires corporations to maintain capital accounts for each class of shares. Although, as discussed below, these capital accounts are simpler than the capital accounts required to be maintained for each partner in a partnership under the regulations under IRC § 704(b), they still add complexity to the shareholder allocation system. Capital accounts are needed, however, to help ensure that allocations of tax consequences follow allocations of economic income. As the following simplified example demonstrates, without tax rules requiring capital accounts, the corporation could allocate tax liability without regard to the economic substance of the capital structure.

Example. Two shareholders each contribute \$1,000 to a new corporation. One shareholder has a 15 percent marginal rate and enough other tax liability to absorb excess credits, and the other has a 31 percent marginal rate. The corporation issues Class

A stock, which is allocated 100 percent of the corporation's taxable income, to the low-bracket shareholder. The corporation issues Class B stock to the high-bracket shareholder and provides that no taxable income will be allocated to the Class B stock. Cash distributions, however, are to be made pro rata between the Class A stock and the Class B stock. If these allocations are respected, all the corporation's taxable income and credits for corporate taxes paid will be allocated to the 15 percent shareholder. The Class A shareholder's share basis will increase accordingly, but the Class B shareholder's basis will remain \$1,000. Thus, when the corporation is liquidated, the low-bracket shareholder will realize a loss and the high-bracket shareholder will realize a gain. In the meantime, however, the shareholders have arranged for substantial deferral of tax by having the corporation's income taxed currently at 15 percent (rather than having half taxed at 15 percent and half taxed at 31 percent, in accordance with the economic bargain between the parties).

This strategy would fail if the allocations were subject to the "substantial economic effect" requirement of IRC § 704(b). The rules under IRC § 704(b) would require the allocation of equal amounts of income to the two shareholders in order to establish capital accounts that would permit an equal division of liquidation proceeds.

Thus, some capital account mechanism is needed in the shareholder allocation prototype. The remainder of this discussion outlines generally the mechanics of maintaining capital accounts. Because we do not recommend adoption of shareholder allocation, however, we have not developed the additional technical analysis needed for a workable capital account regime.²³

Capital accounts should be easier to maintain under shareholder allocation than under the partnership rules because the shareholder allocation prototype passes through only a single item (net taxable income) and a proportionate amount of credits for taxes paid. As a consequence, capital accounts increase by the amount of income allocated, net of credits for corporate taxes paid, and decrease by the amount of distributions. Further, because each share of stock within a class of stock receives a pro rata share of the income and taxes allocated, it is not necessary to keep detailed capital accounts for each

shareholder. Instead, capital accounts can be maintained for each class of stock. Rules also would be needed to govern the allocation of losses to capital accounts. Although losses are not passed through to shareholders, losses reduce corporate assets available for distribution and should be reflected in capital accounts. Special allocations of losses among classes of stock are permitted, if appropriately reflected in capital accounts. While special allocations of losses create additional complexity, relative to a system in which losses are required to be allocated in proportion to income allocations, they seem necessary to preserve corporations' ability to issue preferred stock.²⁴ It may be difficult, however, to fashion practical rules that allow special allocations of losses to capital accounts that are liberal enough to preserve typical corporate capital structures but are restrictive enough to prevent abuse.

Existing corporations would have to seek shareholder approval to modify the terms of outstanding stock to provide for allocations of corporate income and the maintenance of capital accounts. This is likely to be a lengthy and difficult process that would substantially complicate the transition to a shareholder allocation system of integration. Accordingly, while we do not recommend shareholder allocation, if it were adopted, we would recommend a delayed implementation. See Chapter 10. Additional transitional rules may be needed to provide relief where a corporation cannot obtain the necessary shareholder approvals, for example, because of state law or contractual supermajority requirements.

3.G CHANGE OF STOCK OWNERSHIP DURING THE YEAR

Allocating both a corporation's retained and distributed income to shareholders requires a mechanism to reflect changes in stock ownership during the period to which such income relates and thereby apportion income tax consequences among the corporation's various owners. The current rules are straightforward: corporations pay dividends to the shareholder who owns the stock

on the dividend record date and the Code taxes the person who receives the dividend.

The shareholder allocation prototype requires that corporate taxable income and corresponding credits for corporate taxes paid be allocated to shareholders of record as of the end of each quarter of the corporation's taxable year.²⁵ Corporations would not close their books and file tax returns and information returns quarterly, but rather would close their books at year end and allocate net income ratably to the record holder of the stock at the end of the four quarters.²⁶

Closing corporate books at year end and allocating income pro rata among shareholders of record unavoidably creates problems in the treatment of shareholders that sell shares before corporate income and corporate taxes are known at the end of the year. As long as there is uncertainty concerning a given quarter's income, the buyer and seller of stock will not be able to price the stock accurately.

Example. At the beginning of the year, a corporation has assets of \$100. Shareholder A owns 100 percent of the single class of stock and has a basis in the stock of \$100. The corporation's taxable year is the calendar year. On July 1, when the corporation has earned \$25 of taxable income, A sells all her stock to Shareholder B for \$117.25. If the corporation's books closed on June 30, it would pay \$7.75 of corporate tax and would allocate \$25 of income and \$7.75 of tax credits to A. If A has a marginal tax rate of 31 percent, the taxable income allocated to her will be exactly offset by the allocated credits. A's basis in her stock would increase to \$117.25, and A would report no gain on the sale. Because the shareholder allocation prototype does not determine taxable income until year end, A's final basis will be determined based on her pro rata share of the actual earnings and taxes paid for the year, which will turn on events subsequent to A's sale of stock and may differ from estimated earnings as of the date of sale. For example, if the corporation's taxable income for the full year is \$80, A will be allocated \$40 of income and \$12.40 of tax credits and her basis will increase to \$127.60. She will report a capital loss of \$10.35.²⁷

Thus, while a shareholder can tentatively calculate gain on a sale at the time the sale is made, that estimate may need to be revised based

on more precise or differing information available only later and may even require the filing of an amended return.²⁸ The problem of amended returns may be particularly acute for shareholders that hold stock in corporations with taxable years other than the calendar year. The uncertainty of income allocations may result in some inefficiency in pricing sales of stock, although sellers of large blocks of stock may be able to limit uncertainty by effectively shifting the tax burden through contractual mechanisms.

This uncertainty could be reduced by requiring a quarterly closing of corporate books.²⁹ We rejected such a requirement, however, as imposing too great a reporting burden at the corporate level. Requiring quarterly filings of Form 1120 and quarterly information reports to shareholders would significantly increase the tax reporting burden on corporations. Although many large corporations must file quarterly financial statements (10-Qs) with the Securities and Exchange Commission (SEC), and most corporations must make quarterly estimated tax payments, refining that information to the degree of precision needed for tax return purposes can be a time-consuming process. Requiring a true quarterly closing of books would in effect abandon the taxable year concept and substitute a "taxable quarter" regime.³⁰

Some intermediate solution may be possible. For example, capital gains and extraordinary dispositions could be allocated to the quarter in which they occurred. Large corporations might be required to provide estimates of each quarter's income, based on 10-Q filings (if any) and the kinds of calculations used for estimated taxes. Shareholders could be permitted to report the estimated income and tax amounts and make corrections when final reports were issued after year end. Such a system would, however, allow a significant degree of latitude to corporations unless there were rules governing the quarterly estimating and annual correction process. Such rules would likely be complex.

This problem would not exist in a pure pass-through integration system with no corporate level

tax, no differences in the treatment of capital gains and losses and ordinary income and full flow through of corporate losses to shareholders.³¹ For the policy reasons stated above, however, the shareholder allocation system retains the corporate level tax and does not require a quarterly closing of books. Accordingly, unless a satisfactory intermediate solution can be devised, the uncertainty of tax consequences for midyear sales of stock is unavoidable and is one of the significant obstacles to adoption of the shareholder allocation prototype.

3.H REPORTING AND AUDITING CONSIDERATIONS

As the preceding discussion makes clear, any passthrough integration system would increase the administrative burden on corporations and their shareholders. Although the shareholder allocation prototype includes simplified reporting provisions, it does require corporations to provide information reports (not now required) to shareholders showing each shareholder's portion of corporate taxable income and credits for corporate taxes paid (including other tax credits claimed by the corporation). The information returns also would have to provide information on appropriate basis adjustments. Because basis will increase for tax-exempt income, the basis adjustment will not necessarily be the same as the allocated income less the allocated tax credits. Shareholders, in turn, must take into account both corporate income and credits for corporate taxes paid in calculating their own tax liability and will need to keep detailed records to determine share basis when stock is sold.

Another administrative problem is the timing of income reporting. For example, U.S. corporations cannot report taxable income and corporate level taxes to shareholders until they receive reports of the taxable income and credits of other U.S. corporations in which they own stock. We have been unable to devise a precise solution for these timing issues. The taxable years of members

of a consolidated group or other closely held and closely affiliated corporations can be conformed so that income is calculated at the same time. For corporate portfolio shareholders, however, timing difficulties may be severe. Before shareholder allocation could be implemented, it would be necessary to design a reporting system capable of accommodating corporate cross-ownership.³²

The shareholder allocation system also requires substantial changes in the way corporations and shareholders are audited. In theory, under a shareholder allocation system, any increase or decrease in tax as a result of an adjustment to a tax return, resulting from an IRS audit or an amended return, should be reflected in the tax liability of the shareholders. The current system for partnerships carries an adjustment back to the partners' taxable year in which the understatement arose. Thus, if in 1990, it were determined that a partnership's income for 1988 had been understated by \$1,000, the increase of \$1,000 would be allocated to those who were partners in 1988. Extending this regime to corporations under integration would require the IRS to track and adjust the returns of shareholders holding stock in prior years. Furthermore, under such a system an adjustment in one year may require related adjustments in other years.

To avoid these problems, the shareholder allocation integration prototype would treat any audit or other adjustment to corporate income as a taxable event in the year of the adjustment. Under the prototype, it is unnecessary to adjust returns of prior year shareholders because adjustments to corporate income would be treated as an increase or decrease in the corporation's current year taxes and income. The adjustments would be passed through to current year shareholders.³³ The IRS would collect deficiencies directly from the corporation, and the corporation would pass through the credits for corporate taxes paid along with the additional income. Shareholders' bases would be adjusted to reflect the additional income.

3.I TREATMENT OF TAX-EXEMPT AND FOREIGN SHAREHOLDERS

Tax-Exempt Shareholders

The shareholder allocation prototype maintains the current taxation of corporate equity income allocated to tax-exempt shareholders by making shareholder credits for corporate level taxes nonrefundable to tax-exempt shareholders. Thus, tax on corporate income allocable to a tax-exempt shareholder would be taxed at the corporate level at the corporate rate. Tax-exempt shareholders would not be subject to UBIT on corporate income allocated to them and would not be allowed to use credits for corporate taxes paid to offset UBIT liability on other income.

Foreign Shareholders

We believe that foreign shareholders making investments in the United States should not receive, by statute, the benefits of integration received by U.S. shareholders. Thus, the shareholder allocation prototype denies refunds of corporate level taxes to foreign shareholders and continues to impose U.S. withholding tax on dividends. As under current law, corporate tax would be paid at the corporate level and withholding tax would be imposed at the investor level. The branch profits tax would continue to apply to U.S. branches of foreign corporations. Although in principle, the shareholder level withholding tax might be imposed on income allocated annually, the prototype continues to impose withholding tax only when distributions are made. Annual imposition of both the corporate and the investor level taxes would increase the tax burden on foreign investments in U.S. corporations as well as the disparity in the treatment of debt and equity owned by foreign investors. Denying integration benefits to foreign shareholders under the shareholder allocation prototype does not violate U.S. tax treaty obligations. Refundability of all or a part of the credit could be considered in treaty negotiations in exchange for reciprocal benefits. See Chapter 7.

3.J FOREIGN SOURCE INCOME

We do not believe that an integrated tax system should, by statute, treat foreign taxes like taxes paid to the U.S. Government. Extending the benefits of integration to foreign taxed income, if appropriate, is more properly achieved through bilateral tax treaty negotiations. See Chapter 7. Accordingly, the dividend exclusion and CBIT prototypes are designed to collect at least one full level of U.S. tax on foreign source income earned by U.S. corporations.

In contrast, the shareholder allocation prototype treats foreign taxes paid like U.S. taxes paid. As a consequence, depending on foreign tax rates, the United States may collect only a residual U.S. tax or no tax at all on corporate foreign source income. We considered modifying the shareholder allocation prototype to account separately for foreign taxes and deny foreign tax credits to shareholders, but such modifications are complex and fundamentally inconsistent with the pass-through nature of the prototype.³⁴ Denying a foreign tax credit would be harsher than current law, which generally allows a foreign tax credit at the corporate level and defers the shareholder level tax on foreign source income until it is distributed. Modifying the shareholder allocation prototype to tax foreign source income to shareholders only when distributed would effectively convert shareholder allocation into distribution-related integration.

Accordingly, the shareholder allocation prototype allows a foreign tax credit, computed under current law rules, to offset corporate level tax. The foreign tax credit, like other corporate tax credits, is passed through to shareholders. One issue this approach raises is how, if at all, the foreign tax credit limitation rules should be applied at the shareholder level. Although the foreign tax credit limitation is computed initially at the corporate level, additional restrictions would be necessary to prevent individuals with marginal tax rates of less than 31 percent from using foreign tax credits to offset liability for U.S. tax on other income.³⁵

As under current law, the shareholder allocation prototype allows an individual U.S. shareholder holding stock directly in a foreign corporation to claim a foreign tax credit for withholding taxes paid on dividends. The prototype does not extend the indirect foreign tax credit of IRC § 902 to individual shareholders of a foreign corporation. The indirect credit was originally intended to prevent multiple taxation of corporate income earned through a foreign subsidiary. Because the shareholder allocation regime extends integration to foreign taxes, however, permitting individuals owning more than 10 percent of the stock of a foreign corporation to claim an indirect credit may merit consideration. Extending the indirect credit to U.S. individual shareholders would remove the disparity that would otherwise exist between foreign corporate stock held directly and foreign corporate stock held through a U.S. corporation. Such a change, however, would be a significant departure from current law and would exacerbate the problem of fashioning an appropriate limitation rule at the shareholder level.

Another issue for outbound investment in structuring the shareholder allocation integration prototype is whether to retain or eliminate the deferral allowed for profits earned through foreign

subsidiaries. As Chapter 7 explains, the deferral rule provides that profits of a U.S. investor earned through a foreign corporation are generally not subject to U.S. tax until the profits are repatriated. Although theoretical consistency in implementing a shareholder allocation integration system would require eliminating the deferral rule, taxing foreign income currently is not essential to shareholder allocation. As a practical matter, it would be difficult to end deferral for U.S. portfolio shareholders, because sufficient information would not be available from the foreign corporation to determine the domestic shareholder's tax liability on undistributed income. Even for large shareholders, requiring annual reporting of income and foreign taxes paid by foreign subsidiaries would compound the reporting problems discussed in Section 3.H. A corporation with foreign subsidiaries could not accurately report to its shareholders its own income for the year until its subsidiaries had paid their own taxes in foreign jurisdictions. Accordingly, the shareholder allocation prototype permits U.S. shareholders in foreign corporations to continue to take income into account only when dividends are received. The same rule applies to U.S. corporate shareholders, subject to the current Subpart F and other current inclusion rules.

CHAPTER 4:

COMPREHENSIVE BUSINESS INCOME TAX PROTOTYPE

4.A INTRODUCTION

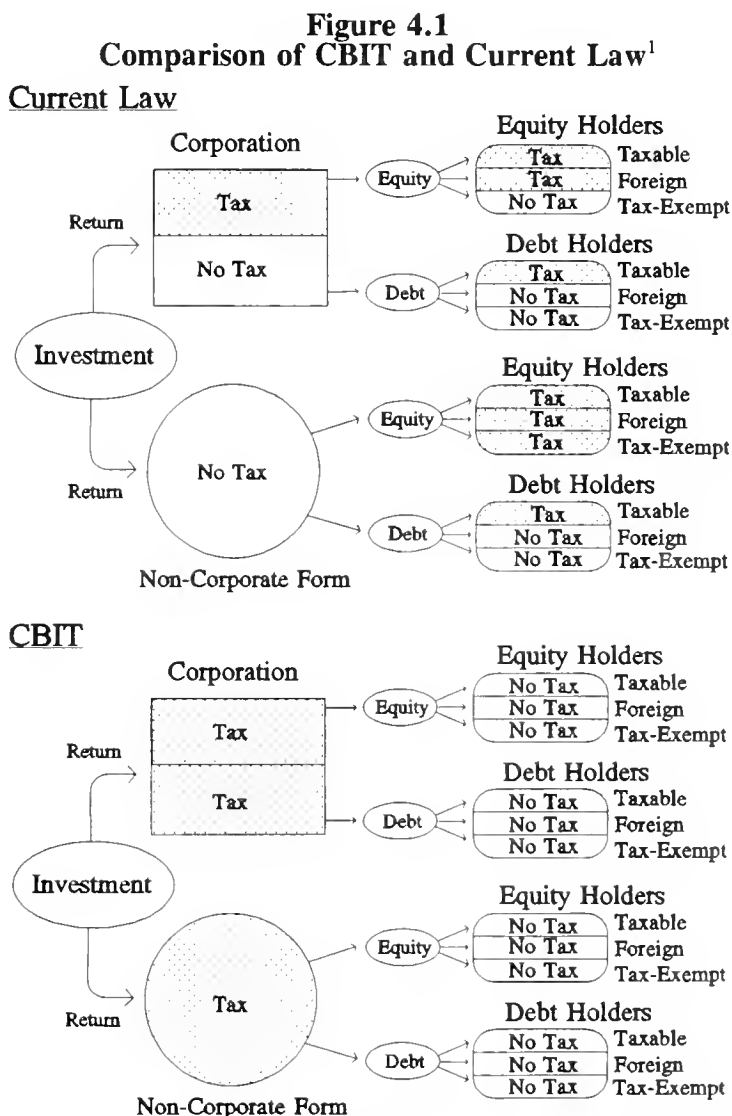
The Comprehensive Business Income Tax (CBIT) is the most comprehensive of the integration prototypes developed in this Report.¹ It is not expected that implementation of CBIT would begin in the short term, and full implementation would likely be phased in over a period of about 10 years.² The CBIT prototype represents a very long-term, comprehensive option for equalizing the tax treatment of debt and equity.

CBIT would equate the treatment of debt and equity, would tax corporate and noncorporate businesses alike, and would significantly reduce the tax distortions between retained and distributed earnings. CBIT would accomplish these results by not allowing deductions for dividends or interest paid by the corporation, while excluding from income any dividends or interest received by shareholders and debtholders. To ensure consistent treatment of corporate and noncorporate entities, CBIT would apply to all but the smallest businesses, whether conducted in corporate form or as partnerships or sole proprietorships. The result is that one—but only one—level of tax would be collected on capital income earned by businesses. An illustration of taxation under the current classical corporate tax and CBIT is depicted in Figure 4.1.

Under current law, income distributed on corporate equity generally bears two levels of tax, while interest paid to suppliers of debt capital bears at most one level of tax. CBIT not only eliminates the double taxation of corporate equity income, but also provides equal treatment for debt income. By denying a deduction for interest, the CBIT prototype subjects interest income, like dividend income, to a single level of U.S. tax equal to the top

individual rate of 31 percent rate, regardless of the lender's actual marginal tax rate and regardless of the lender's status as a tax-exempt or foreign entity.³

Without any overall revenue loss, the CBIT prototype permits a reduction in the rate of tax on corporations from 34 percent to the top individual rate of 31 percent.⁴ A lower rate of tax on capital supplied by tax-exempt, foreign or low-income



¹The figures do not take into account tax preferences or taxes imposed by other countries.

investors could be incorporated into a CBIT regime, but we have chosen not to include these complicating provisions in the prototype described in this chapter.⁵ Taxing income from business capital at a 31 percent rate enhances economic efficiency and advances the policy goals set forth in Chapter 1.⁶ CBIT taxes corporate and non-corporate businesses (other than very small businesses) under identical rules, thus eliminating the current tax bias against the corporate form. CBIT also makes significant progress toward the removal of incentives to retain earnings, although a compensatory tax on distributions of preference income, if included in CBIT, would provide some incentive to retain such income.

Like the other prototypes, the CBIT prototype is structured to conform as closely as possible to the policy decisions summarized in the introduction to this part with respect to the treatment of preferences and tax-exempt and foreign investors. Since CBIT would be a greater change from current law than either distribution-related integration or shareholder allocation integration—both of which would apply only to corporate equity—a very gradual phase-in of CBIT over a long period will be necessary in order to reduce the economic dislocations and the gains and losses that might result during the transition. See Chapter 10.⁷

4.B OVERVIEW OF CBIT PROTOTYPE

General Mechanics. Under CBIT, distributions of business income as dividends or interest are not generally taxed when received by investors (see the discussion of tax preferences below). The income of all business entities, including corporations and unincorporated businesses, is measured and taxed at the entity level at a 31 percent rate.⁸ The CBIT tax base is generally the corporate income tax base under current law, except that no deduction is allowed for interest expense, and dividends and interest received from CBIT entities are excluded. Losses incurred at the entity level do not pass through to the equity holders. Unused losses can be carried over at the entity level, however, generally in the same manner as under the current law rules applicable to corporations.⁹

Small Business Exception. Because it is difficult to separate returns to capital from returns to labor in the case of very small businesses, taxing all capital income from those businesses at the 31 percent CBIT rate might overtax some labor income that otherwise would be taxable to an individual in a lower bracket. The CBIT prototype includes an exception for very small businesses. See Section 4.C.

Tax Preferences. Tax preferences available to corporations generally would be available to CBIT entities. To implement this Report's general recommendation that preferences not be extended to shareholders, a flat rate nonrefundable tax of 31 percent (a compensatory tax) could be imposed at the entity level on dividends and interest deemed paid from preference income. Alternatively, investors could be required to include in income any interest or dividends considered to be paid out of preference income. The choice between these two methods is discussed in Section 4.D. In either case, businesses would determine which distributions are made out of preference income by maintaining an Excludable Distributions Account (EDA), which is similar to the EDA described in Chapter 2 under the dividend exclusion prototype. The EDA would reflect taxes paid and the prototype would stack interest and dividend payments first against fully-taxed income.¹⁰ See Section 4.D.

CBIT Entities as Investors. CBIT entities are governed by the rules applicable to nonCBIT investors. Income from investments (other than dividends and interest from CBIT entities) is taxed to the CBIT entity as under current law. Dividends and interest from CBIT entities are not taxed in the hands of the recipient CBIT entity and would result in an appropriate addition to the recipient entity's EDA (thereby enabling the recipient CBIT entity to distribute such receipts without paying additional tax). Additional rules would be needed for taxable dividends and interest paid by CBIT entities if a compensatory tax were not adopted. See Section 4.D.

Foreign Source Income. CBIT entities would be entitled to a foreign tax credit computed as

under current law, with modifications to reflect the nondeductibility of interest under CBIT. Foreign source income shielded from U.S. tax by foreign tax credits would be treated in a manner similar to preference income when distributed and either would be subject to a compensatory tax or would be taxable at the investor level at that time. As with distributions from preference income, stacking distributions first against fully-taxed income will limit somewhat application of these rules.

Low-Bracket Investors. While the CBIT prototype does not include explicit relief for low-bracket equity holders and debtholders, it is possible to reduce the effective rate of tax on CBIT investments from 31 percent to the investor rate with an investor credit for entity level taxes paid. See Section 4.F.

Tax-Exempt and Foreign Investors. Interest and dividends paid to tax-exempt and foreign investors by a CBIT entity are net of the 31 percent entity level tax; however, in general neither tax-exempt nor foreign investors are subject to additional U.S. tax on interest or dividends received from CBIT entities. If a compensatory tax is adopted, all dividends and interest would be excludable. As Section 4.D discusses, however, the alternative to a compensatory tax is to tax preference and foreign source income at the investor level.

We recognize that, in imposing one level of source-based taxation on interest paid to foreign investors, CBIT would represent a departure from current policy on inbound debt investment. Any such departure would have to be the result of extensive international discussions with tax authorities and market participants.¹¹

Capital Gains and Share Repurchases. Chapter 8 discusses the treatment of capital gains on CBIT equity and debt and the treatment of share repurchases.

NonCBIT Interest and Other Capital Income. CBIT does not require any change in the current taxation of interest paid on debt issued by a

borrower other than an entity subject to CBIT. Thus, for example, home mortgage interest would continue to be deductible by an individual borrower and includable in the income of the recipient. State and local bond interest would remain excludable from gross income to the same extent as under current law. Interest on Treasury debt would, as under current law, be includable in income by the recipient.¹² See "Interest Not Subject to CBIT" in Section 4.G.

Impact on tax distortions. Table 4.1 illustrates the impact of the CBIT prototype on the three distortions integration seeks address: the current law biases in favor of corporate debt over equity finance, corporate retentions over distributions, and the noncorporate over the corporate form. In general, CBIT is very successful in achieving the goals of integration because it removes most differentials in the tax rates on alternative income sources for domestic and foreign investors and tax-exempt entities. The near-uniform tax rate on all nonpreference, U.S. source business income is the maximum individual income tax rate (t_i^m , 31 percent under current law). For individual investors, the only exceptions to this uniform rate are for undistributed corporate equity income (if capital gains on corporate stock continue to be taxed) and for rent and royalties, which would continue to be taxed at regular individual rates. For tax-exempt entities and foreign investors, the only exception to the uniform rate on nonpreference, U.S. source business income is the rate on rents and royalties, for which current law rates would be retained.

4.C ENTITIES NOT SUBJECT TO CBIT

In theory, CBIT would apply to all businesses, without regard to size or legal form of organization. Thus, all sole proprietorships, partnerships, S corporations and other business entities would be subject to an entity level tax. After the phase-in of CBIT, current law distortions between the corporate and noncorporate business sectors would thus be eliminated, and taxpayers' choice of business entity would depend entirely upon nontax considerations. To preserve these

Table 4.1
Total U.S. Tax Rate on a Dollar of
NonPreference, U.S. Source Income from a
U.S. Business Under Current Law and the
CBIT Prototype

Type of Income	Current Law	CBIT
I. Individual Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_i$	t_i^m
Undistributed	$t_c + (1 - t_c)t_g$	$t_i^m + (1 - t_i^m)t_g$
Noncorporate Equity	t_i	t_i^m
Interest	t_i	t_i^m
Rents and Royalties	t_i	t_i
II. Tax Exempt Entity is Income Recipient		
Corporate Equity:		
Distributed	t_c	t_i^m
Undistributed	t_c	t_i^m
Noncorporate Equity	t_c	t_i^m
Interest	0	t_i^m
Rents and Royalties	0	0
III. Foreign Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_{WD}$	t_i^m
Undistributed	t_c	t_i^m
Noncorporate Equity	t_{WN}	t_i^m
Interest	t_{WI}	t_i^m
Rents and Royalties	t_{WR}	t_{WR}
Department of the Treasury Office of Tax Policy		

t_c = U.S. corporate income tax rate.

t_i = U.S. individual income tax rate.

t_i^m = Maximum U.S. individual income tax rate.

t_g = U.S. effective individual tax rate on capital gains; is zero in one version of the prototype.

t_{WD} , t_{WN} , t_{WI} , t_{WR} = U.S. withholding rates on payments to foreigners of dividends, noncorporate equity income, business interest, and rents and royalties, respectively. Generally varies by recipient, type of income, and eligibility for treaty benefits and may be zero.

neutrality benefits, we believe that any small business exception to CBIT should be limited to very small entities.

The CBIT prototype includes an exception for small businesses with gross receipts of less than \$100,000. Such businesses would continue to deduct their interest expense, and the interest they pay would be taxable to the recipients. Any wages or profits distributed by an exempt small business would be taxable to the recipients at the

recipients' marginal tax rates. CBIT interest and dividends received by a small business would be excludable. We concluded that such an exception was desirable because of complexities that might otherwise arise in the transition from current law to CBIT and difficulties in separating capital income from labor income for very small businesses (proprietorships, in particular). Although CBIT generally taxes the income shares of creditors and equityholders at a uniform 31 percent rate, it does not alter the current progressive individual rate structure (with graduated rates from 15 to 31 percent) for taxing wages or other labor income and nonCBIT capital income. While all CBIT taxpayers would be allowed to deduct reasonable compensation paid for services to the same extent as under current law, these rules may be inadequate for small businesses. In many small businesses, income received by an owner-manager, in fact, may be a mixture of returns on both physical and human capital. Ignoring the distinction and subjecting all the owner-manager's income to the uniform CBIT rate, might overtax the labor component of the owner-manager's income. In addition, not allowing losses to flow through currently might create significant hardship where the owner-manager draws a salary. With a small business exception, however defined, all returns on capital in such nonCBIT small businesses would be taxed at the investors' separate rates instead of at the uniform CBIT rate.¹³

We concluded that an exclusion based on annual gross receipts would be the simplest to structure and estimate at the current conceptual phase of the prototype's development. For purposes of determining an entity's eligibility for the exception, dividends and interest received from CBIT entities would be included (although they would not be taxable to the receiving entity). Such a definition of the exclusion has several advantages. A gross receipts criterion is objective and easier to apply from a compliance and enforcement standpoint than the alternatives discussed below. It can be determined readily from documents currently generated for tax compliance purposes.¹⁴ So long as the lower bound of gross receipts determining CBIT status is low, we

believe that aggregation rules for nonCBIT entities should be unnecessary.¹⁵

Other criteria are possible. Ideally, the criteria should be related to the potential "blurring" of owners' capital and labor incomes. For example, businesses with substantial equity held by individuals who also supply substantial labor to the enterprise might qualify. Other definitions currently used in the Code or elsewhere include criteria such as whether the business is closely held (as measured by the number of shareholders), the value of the business (as measured by the value of stock, net worth, or the value or adjusted basis of assets), the annual amount (or average annual amount) of net income, and the number of employees. The correlation between blurring of labor and capital income of owner-managers and some of these characteristics may depend on the nature of the business, industry characteristics, and other factors. We believe the more practical course, however, is simply to exempt certain "small businesses" based on size.¹⁶

4.D TAX PREFERENCES

Introduction

We have made a general recommendation in this Report that integration should not become an occasion for extending corporate level tax preferences to shareholders. Future policymakers seem likely, however, to retain many of the preferences currently available to corporations under the Code. Absent special rules, CBIT's general exclusion of dividends and interest from income would automatically extend those preferences to shareholders.¹⁷

There are two general mechanisms which could be used to ensure that one level of tax is imposed on preference income when it is distributed. First, CBIT entities could be required to report to shareholders and debtholders the amount, if any, of each dividend or interest payment that is made out of preference income. The investor would then include that amount in income and pay tax at the investor's tax rate. This is the mechanism we recommend in the dividend

exclusion prototype.¹⁸ The alternative approach is to impose a 31 percent compensatory tax at the entity level on all distributions from preference income. Such a compensatory tax would not be refundable to tax-exempt or foreign investors.

Although both systems have advantages, the dividend exclusion prototype (and the imputation credit prototype described in Chapter 11) reject a compensatory tax in favor of shareholder level taxation of distributed preference income and foreign source income shielded from U.S. tax by foreign tax credits. As Section 11.B discusses, in those prototypes, which are limited to corporate equity, this Report would tax preference income and foreign source income at the shareholder level in order to preserve current tax and dividend policy for corporations with substantial amounts of such income.

Under CBIT, however, a compensatory tax has considerable conceptual and practical appeal. Adopting a compensatory tax would permit investors to exclude all dividends and interest received from any CBIT entity. Thus, CBIT would consistently collect tax on capital income, whether interest or dividends, at the entity level at a 31 percent rate.

A compensatory tax would be simpler at the investor level. Because all distributions with respect to CBIT investments would be excludable by investors, no information reporting to shareholders or debtholders would be required. On the other hand, if preference income distributed as interest or dividends were subject to investor level tax, CBIT entities would have to provide information reports to the IRS and to investors, indicating the extent to which a distribution is excludable. A compensatory tax under CBIT also would permit the complete repeal of the withholding tax on dividends and interest paid to foreign investors. See Section 4.E.

The principal disadvantage of a compensatory tax under CBIT is that our economic analysis suggests that it would create significant inefficiencies in corporate payout decisions. Our data indicate that even if distributions were stacked

first against fully-taxed income, a compensatory tax would impose a significant entity level tax burden on distributions. Our models of corporate behavior predict that, to avoid this additional tax, CBIT entities would increase their reliance on retained earnings as a source of finance and would rely less on both new equity and debt. Under the assumptions of our models, this effect is strong enough to distort corporate payout decisions as much as under current law. See Section 13.D. Accordingly, the remainder of this chapter describes the differences in treatment necessary under the CBIT prototype if no compensatory tax is imposed and distributed preference income and foreign source income are taxed at the investor level.¹⁹

Excludable Distributions Account

The prototype identifies distributions out of preference income and foreign source income shielded from tax by foreign tax credits by requiring CBIT entities to maintain an Excludable Distributions Account (EDA). (The EDA is similar to the EDA described in Chapter 2, except that interest payments as well as dividend payments are charged against the account.) For each \$1.00 of U.S. tax paid, approximately \$2.23 would be credited to the EDA. The annual addition to the EDA is referred to as fully-taxed income and is calculated using the following formula:

Annual additions to EDA =

$$\left[\frac{\text{U.S. tax paid for taxable year}}{.31} - \text{U.S. tax paid for taxable year} \right]$$

+ equity distributions and interest received from CBIT entities

The EDA is reduced by the amount of all dividend and interest payments, in the order in which payments are made. The EDA is also reduced by approximately \$2.23 per \$1.00 of tax refunded. Positive EDA balances may be carried forward without limitation.

The prototype stacks payments first against fully-taxed income. Distributions of interest or dividends reduce the EDA. When the EDA is reduced to zero, distributions would be subject to

compensatory tax or, alternatively, would be taxable to the investor.²⁰ As in the dividend exclusion prototype, refunds of entity level tax would not reduce the EDA below zero. Refunds in excess of the taxes reflected by the EDA balance would be applied to reduce future entity level tax payments. Similarly, net operating losses in excess of the EDA would be carried forward.

To illustrate, assume that a corporation subject to CBIT earns \$100 in taxable income and \$100 of preference income, and pays \$31 in regular CBIT taxes but neither pays nor receives dividends or interest. Its EDA is thus \$69 [\$31/.31 – \$31]. If it then pays \$75 in interest and dividends, it will pay a compensatory tax of \$1.86 [.31 × (\$75 – \$69)] or, alternatively, the \$6 of distributions that is attributable to preference income will be taxable to investors.²¹

If a compensatory tax is adopted, all distributions on equity and debt of CBIT entities will be excludable. A CBIT entity receiving a distribution would add the amount received to its own EDA. If, alternatively, distributions of preference income were taxable to investors, the prototype could either (1) tax CBIT entities currently on such distributions²² or (2) provide a deduction, similar to the current dividends received deduction, for such receipts to defer tax until the income is redistributed to a nonCBIT entity.²³

Alternative Minimum Tax Consequences of CBIT

The CBIT system retains an entity level alternative minimum tax (AMT) similar to the corporate AMT under current law. As under current law, the entity level minimum tax would ensure that some entity level tax is imposed currently on a profitable business. In a CBIT AMT, however, neither interest expense nor dividends would be deductible and dividends and interest from CBIT entities would be excluded. Because the CBIT tax base provides no deduction for interest paid, it is likely that relatively few nonfinancial businesses would have regular tax liabilities low enough to trigger a CBIT AMT imposed at the current 20 percent rate. As in the

dividend exclusion prototype, AMT would be treated as taxes paid in the same manner as the regular CBIT tax; however, the divisor in the EDA formula would still be the regular CBIT tax rate, 31 percent. Thus, a CBIT entity could not distribute all of its alternative minimum taxable income (AMTI) without triggering a compensatory tax or an investor level tax.

Adopting CBIT might permit significant simplifying modifications to the current individual AMT. If CBIT applied to all but small business entities, the individual AMT base would apply principally to two items: (1) excess itemized deductions and (2) State and local tax-exempt bond income treated as a preference under current law.²⁴ It would be inappropriate, however, to include excludable CBIT interest or equity income in an investor's AMTI because any such tax imposed would be a second level of tax on income that had already been subjected to tax at the highest individual rate.²⁵

4.E INTERNATIONAL CONSIDERATIONS

Taxation of Income from Outbound Investment

This Report recommends that the tax burden imposed by any integration prototype on income from U.S. investment in foreign businesses (outbound investment) be roughly equivalent to the tax burden imposed on such income under current law. The shift from two-tier taxation of corporate foreign source income to a single-tier tax should not result in the collection of a significantly greater or lesser amount of tax revenue from such income than under current law. See Chapter 7.

Under current law, foreign source income earned through a domestic corporation is potentially subject to U.S. tax at both the corporate and the shareholder levels. At the corporate level, foreign source income is subject to a 34 percent tax, which may be reduced substantially or eliminated by foreign tax credits. If the U.S. corporate

tax liability on foreign source income is less than the foreign tax imposed on the income, excess foreign tax credits may arise. Upon distribution, the income generally is subject to full taxation at the shareholder's marginal tax rate, without a foreign tax credit. This approach is consistent with U.S. income tax treaty commitments. No U.S. treaties require that investors in a U.S. corporation receive tax relief from foreign taxes paid by the corporation.

Foreign Source Income of CBIT Entities and Other Business Entities

Under the CBIT prototype, results comparable to those under current law are achieved by allowing the foreign tax credit (with a modified limitation, as described below) to offset the regular CBIT tax in full, but adding no amount to the EDA to reflect foreign source income sheltered from U.S. tax by foreign tax credits.²⁶

The EDA mechanism does not distinguish between foreign source income shielded from the regular CBIT tax by the foreign tax credit and U.S. source preference income. Both benefit from the stacking rule that treats distributions as arising first from income subject to the regular CBIT tax. Accordingly, as with preference income, so long as foreign source income shielded from CBIT by the foreign tax credit is not distributed, it will bear no further tax burden. The CBIT compensatory tax or an investor level tax will be triggered only when such income is distributed—the same circumstance that would result in imposition of a shareholder level tax under current law.

If a compensatory tax is not adopted, this stacking rule ensures that the total Federal tax burden on outbound investment by corporations should not vary significantly from that imposed under current law, apart from the effect of the expanded tax base for foreign branch income resulting from the nondeductibility of interest. Imposition of a compensatory tax could increase the tax revenue collected from outbound investment. In either case, the tax burden on outbound investment by corporations may actually be less

for foreign source income subject to foreign tax at a rate less than the CBIT rate, which will be subject to only a single level of residual U.S. tax.

CBIT will, however, require modification of the current rules for computing the foreign tax credit. Under current law, the foreign tax credit limitation is equal to the product of (1) the taxpayer's pre-credit U.S. tax liability on worldwide taxable income and (2) the ratio of the taxpayer's foreign source taxable income to its worldwide taxable income. This usually reduces to the product of the U.S. tax rate and the foreign source income. The foreign source income of a U.S. taxpayer is currently computed under U.S. tax principles for this purpose.²⁷ In the case of a foreign subsidiary, the amount of foreign taxes that are deemed paid by a 10 percent U.S. corporate shareholder in respect of a particular dividend distribution is equal to the total foreign taxes paid by the subsidiary, multiplied by the ratio of the dividend to the total earnings of the subsidiary. (This amount is subject to the limitation just described.)

If foreign source income were computed under CBIT principles, i.e., with no deduction for interest, problems would arise. In the case of foreign branch operations of CBIT entities, the amount of foreign source income in the limitation formula could increase dramatically. Such an increase would seriously mismatch the computation of taxable income and tax liability by a foreign jurisdiction that allowed a deduction for interest. Assuming that foreign tax rates were high enough to provide an adequate supply of credits, no U.S. tax would be collected currently on foreign source income used to pay interest. Instead, U.S. tax would be collected only when such income was deemed to have been distributed by the entity and a compensatory tax (or an investor level tax) was imposed. In the case of a foreign subsidiary, the amount of earnings in the denominator of the indirect credit fraction could increase dramatically, seriously diluting the amount of foreign taxes attributed to a particular distribution of earnings.

Accordingly, the CBIT prototype assumes that, in computing the foreign tax credit limitation, foreign source income of a branch will be reduced by interest expense claimed with respect to the foreign operations.²⁸ Similarly, in computing the indirect foreign tax credit, earnings of the foreign subsidiary will be reduced by interest expense claimed by the subsidiary.²⁹ Under this approach, CBIT entities will continue to enjoy approximately the same level of direct and indirect foreign tax credits as under current law. Some reduction will occur, however, by reason of lowering the regular CBIT tax rate to 31 percent from the current 34 percent.

Several additional effects of CBIT on the taxation of foreign source income should be noted. As explained above, CBIT would subject all business organizations to an entity level tax. This has at least two possible implications for the foreign tax credit. First, it suggests that an indirect credit for foreign taxes deemed paid by a foreign subsidiary should be available to non-corporate domestic shareholders, such as partnerships, that are CBIT entities. Under CBIT, the purpose of the indirect credit would defer the additional level of CBIT tax until the time of distribution (when a compensatory tax or an investor level tax would be imposed) to avoid the burden of an immediate tax on foreign source profits. If the indirect credit were not extended to partnerships and other noncorporate CBIT entities, there would continue to be a strong bias in favor of the corporate vehicle for multinational enterprises.

Second, the equal treatment of all business entities under CBIT means that foreign tax credits will not fully relieve CBIT tax in circumstances where U.S. tax is fully relieved under current law. If a domestic partnership or S corporation receives a dividend, interest, or royalty payment from a foreign corporation (or other foreign payor) under current law, and the payment has been subject to a foreign withholding tax, the recipient is eligible for a foreign tax credit, and no further U.S. tax is imposed to the extent that

the partners or shareholders are individuals. Under CBIT, however, the credit would only relieve the regular CBIT tax. A compensatory tax or an investor level tax would be imposed when the foreign profits are redistributed to the partner or shareholder.

Finally, CBIT requires some consideration of the treatment of foreign business entities. Under current law, deferral of U.S. tax on foreign profits is available when the profits are earned through a foreign corporation. When such profits are earned through a foreign partnership, the U.S. tax is not deferred, and the results are essentially the same as for a foreign branch office of a U.S. taxpayer. Under the CBIT prototype, foreign entities would generally be treated as nonCBIT entities. Thus, interest paid by a foreign entity would continue to be taxable to a U.S. lender, and would continue to be deductible by the foreign entity.³⁰ In addition, deferral would continue to be permitted for profits earned through a foreign corporation.

Foreign branches of CBIT entities. In the case of a foreign branch of a U.S. CBIT entity, the expanded CBIT income base of the branch would be included in the U.S. CBIT entity's income currently. Foreign source income earned by a CBIT entity through a foreign branch would be subject to residual regular CBIT tax prior to distribution. As discussed above, there will always be a residual regular CBIT tax on the portion of the foreign source income base that is excluded from the computation of the foreign tax credit. Where the foreign jurisdiction's tax is computed with an interest deduction, such income will bear, in effect, the same tax that it would have borne if earned from domestic sources. With respect to the remaining portion of the foreign source income base, a residual regular CBIT tax will be imposed if the foreign income tax liability is less than the regular CBIT liability, with the effect that such income also will bear the same pre-distribution aggregate tax (foreign tax plus CBIT tax) that it would have borne if it were earned from domestic sources.³¹ If the foreign income tax liability on the remaining portion of the foreign source income base is higher than the

regular CBIT liability, such income will bear a pre-distribution tax rate that is higher than the CBIT rate applicable to domestic source income. This disparity, which also exists under current law, is entirely attributable to higher foreign tax rates.

Foreign portfolio equity investment (less than 10 percent of total equity) by a CBIT entity. Foreign source portfolio dividends received by a CBIT entity would be subject to source country income taxation at the level of the foreign corporation and to a second level source country withholding tax upon distribution. Regular CBIT would apply to the foreign source dividend when received by a CBIT entity, subject to offset by a foreign tax credit for the source country withholding tax. In most cases, some regular CBIT would be collected, because regular CBIT liability would generally exceed the foreign withholding tax by virtue of treaty rate reductions and by virtue of the expansion of the CBIT income base to include income paid out as interest. While such income is subject to an additional level of taxation (the foreign corporate level tax) relative to income earned through investment in a U.S. subsidiary, the disparity should be approximately the same as under current law. If distributed by the CBIT entity, such income, to the extent shielded from regular CBIT by the foreign tax credit, would be subject to the CBIT compensatory tax or an investor level tax. If the CBIT entity is a corporation, this result generally will be comparable to the result under current law. To the extent residual regular CBIT is paid, the result will be better than under current law for shareholders now taxable on dividend income. A CBIT entity that is a partnership with individual shareholders or an S corporation may be treated less favorably than under current law in certain circumstances.

Foreign direct equity investment (10 percent or more of total equity). Foreign source income earned by a CBIT entity through a direct equity investment would be subject to full source country corporate level tax and to a second level source country withholding tax upon distribution of a dividend from the foreign subsidiary. The CBIT entity (whether a corporation or partnership)

would receive a credit both for the source country withholding tax and for the source country corporate level tax under IRC § 902. Thus, regular CBIT would be imposed only to the extent that the regular CBIT liability exceeded the total amount of foreign taxes paid or deemed paid. Given the opportunity to defer the CBIT compensatory tax or investor level tax by retention of foreign subsidiary profits at the CBIT entity level, the disparity between direct equity investment in a foreign subsidiary and investment in a domestic subsidiary under CBIT should not vary significantly from current law. If distributed by the CBIT entity, such income would be subject to the CBIT compensatory tax or an investor level tax to the extent it was shielded from regular CBIT by foreign tax credits. However, as with portfolio investment, the result will generally be similar to the result under current law in cases where such dividends would be taxed fully. To the extent subject to residual regular CBIT, such income will be taxed less heavily than under current law. A CBIT entity that is a partnership or an S corporation may be treated less favorably than under current law (depending on whether the IRC § 902 credit is extended to such shareholders).

Foreign debt investment. Foreign source income earned by a CBIT entity through a debt investment in a foreign entity or subsidiary would escape source country income taxation to the extent that interest is deductible for foreign income tax purposes. While such income potentially would be subject to a foreign withholding tax upon distribution as interest, the CBIT entity would receive a foreign tax credit for the withholding tax (subject to the foreign tax credit limitation). Thus, regular CBIT would be imposed only to the extent that regular CBIT liability exceeds the foreign withholding tax. Interest income received from a domestic subsidiary also would be subject to CBIT, in this case imposed on the subsidiary. Thus, outbound debt investment should not be subject to greater entity level tax than domestic debt investment until such income is distributed. The CBIT compensatory tax or an investor level tax then would apply to the extent the income had been shielded from U.S. tax by

foreign tax credits. The impact of the CBIT compensatory tax or an investor level tax, if and to the extent imposed, will be similar to the consequences described for the imposition of such tax on foreign portfolio equity investment.

Foreign Source Income Earned Directly by Individuals

Under CBIT, foreign corporations and other foreign entities would be treated as nonCBIT entities. Accordingly, as under current law, interest and dividend income received directly by a U.S. resident individual from a foreign corporation would be subject to tax at the individual's marginal tax rate. CBIT does not require the modification of the foreign tax credit allowed to individuals under current law.

Taxation of Income from Inbound Investment

As noted in Section 4.A, we view CBIT as a very long-range option for equalizing the treatment of debt and equity. We anticipate that adoption of CBIT would be preceded by a lengthy period of consideration and, when implemented, CBIT would be phased-in over a period of about 10 years. See Chapter 10.

Both the dividend exclusion prototype and the shareholder allocation prototype retain the current U.S. withholding tax on dividends paid to foreign shareholders and the branch profits tax on U.S. branches of foreign corporations. Retaining the second level of tax on equity income in those prototypes simply replicates current law and permits reduction of the second level of tax through tax treaty negotiations.

We make a different recommendation in CBIT, however. Retaining current law in the context of CBIT would require collecting two levels of tax on dividends and zero or one level of tax on interest. (Chapter 7 discusses the current law taxation of foreign investors.) Such treatment would violate the equality between debt and equity that is one of the principal goals of CBIT. To maintain parity between debt and equity, the

CBIT prototype removes the remaining withholding taxes on both interest and dividends paid by CBIT entities.³² The result is to subject both debt and equity income to CBIT taxation once at the entity level.

Elimination of the remaining withholding taxes on both dividends and nonportfolio interest under CBIT would clearly affect U.S. income tax treaty negotiations. While existing U.S. treaties provide for reciprocal reductions of source country tax rates on interest and dividends, CBIT might reduce U.S. treaty partners' incentive to grant a reciprocal exemption in future negotiations.³³ In order to obtain a reciprocal exemption, it might be necessary for the United States to make concessions either with respect to entity level tax collected on dividends and interest or CBIT compensatory taxes (if any) imposed on dividends and interest. For example, a tax credit for CBIT taxes paid could be made available only on a bilateral basis. Any such treaty concessions should be made in a manner to protect CBIT's basic goal of equating the taxation of debt and equity.

If a compensatory tax were not adopted, distributed preference income and shielded foreign source income will be taxable to investors.

We recognize that adoption of CBIT would represent a departure from current policy on inbound debt investment and that any such departure would require extensive international discussions with tax authorities and market participants.

Conduct of a U.S. Trade or Business

As under current law, income earned by a foreign investor through the conduct of a U.S. trade or business would be taxed in the same manner as income earned by U.S. residents. CBIT rules would apply to foreign business activities in the United States. Thus, interest expense attributable to a U.S. trade or business would be nondeductible, and the current law provisions governing the allocation of interest expense to effectively connected income would be unnecessary.³⁴

Small Business Exception

The small business exception would apply to inbound investment. See Section 4.C. Distributions from small, nonCBIT corporations to foreigners would remain subject to current statutory withholding at 30 percent, unless that rate is reduced by treaty provision.³⁵ In the case of a U.S. branch of a foreign corporation, the size criteria would be applied on the basis of the gross effectively connected receipts of the branch.

4.F IMPACT OF CBIT ON INVESTMENT BEHAVIOR OF LOW-BRACKET, TAX-EXEMPT, AND FOREIGN INVESTORS

Overview

Because substantial nontax factors influence investment behavior, we cannot predict with certainty CBIT's impact on the manner in which investors allocate their portfolios. Indeed, if tax considerations were paramount, there would be a strong bias under current law against any investment by low-bracket taxpayers and domestic tax-exempts in domestic corporate equities (as opposed to debt). Current experience indicates, however, that both of these groups invest in corporate equity. While special statutory withholding provisions, the statutory exemption for capital gains realized by foreign investors on property investments other than in real property, and treaty mitigation provisions make it hard to generalize in the case of foreign investors, the tax provisions of current law, if given paramount effect, would direct their investment toward domestic debt rather than corporate equity in most instances. Other nontax factors are important, however, and foreign investment in domestic equity occurs despite higher tax rates than for domestic debt.

The United States' stable economic and political climate attracts investment. The size of our consumer market attracts foreign sellers and

investors. Opportunities for diversification not available through alternative investments can override tax disadvantages. These nontax factors will temper portfolio shifts by these classes of taxpayers. Considering these countervailing forces, we believe that the best approach is to adopt a gradual phase-in of CBIT, rather than specific measures for low-bracket, tax-exempt and foreign investors although we discuss such measures below. To preserve CBIT's neutrality between debt and equity, the discussion contemplates identical treatment of debt and equity. The reductions of tax due to these mechanisms, of course, will have revenue consequences.

Interest Rate Impact of CBIT

The interest rate on CBIT debt will be less than the interest rate on nonCBIT debt, potentially by an amount up to the 31 percent entity level tax, because interest received on CBIT debt represents an after-tax return.³⁶ For example, if market interest rates on nonCBIT debt were 10 percent, a debt instrument issued by a CBIT entity might bear interest at a rate as low as 6.9 percent. If this were the case, the after-tax return on the two instruments would be the same for a taxable investor with a 31 percent marginal rate. While predicting the actual rate relationship between CBIT and nonCBIT debt is impossible, experience with the ratio of interest on tax-exempt state and local bonds to that on taxable corporate bonds suggests that the CBIT interest rate may not reflect a 31 percent tax rate, because there may be insufficient demand for CBIT debt by investors with a marginal rate of 31 percent. Thus, for example, if a nonCBIT bond bore interest at a 10 percent pre-tax rate, a CBIT bond might bear interest at 8 percent if it were necessary to attract lower-bracket investors to CBIT debt. In such a case, the 8 percent (after-tax) CBIT return would be more attractive to an investor in the 31 percent bracket than the 10 percent (pre-tax) nonCBIT return.

Because interest rates on CBIT debt should be lower than the rates on nonCBIT debt, low-bracket, tax-exempt, or foreign investors (collectively, tax-favored investors) can be expected to increase

their holdings of nonCBIT debt and decrease their holdings of CBIT debt. (Overall, these portfolio shifts may be offset by increased demand for CBIT debt and equity by taxable investors.) Depending on their tax rates, tax-favored investors, for example, might prefer a 10 percent nonCBIT bond to an 8 percent CBIT bond. For any investor with a marginal rate of less than 20 percent, a 10 percent nonCBIT return is worth more than an 8 percent CBIT (after-tax) return. While a rate differential of less than 15 percent between CBIT and nonCBIT bond rates should not affect the portfolio choices of low-bracket individual taxpayers, any rate differential could affect investment choices by tax-exempt and foreign investors since, as under current law, all nonCBIT interest paid to tax-exempt investors (and portfolio interest paid to foreign investors) is tax-free at the investor level. Domestic tax-exempt entities might be expected to decrease holdings of CBIT debt and increase holdings of governmental or other nonCBIT debt and CBIT equity.³⁷

The treatment of preference income under CBIT further complicates the analysis of the expected rate differential between CBIT and nonCBIT investments. If a compensatory tax were imposed, all CBIT investments would pay an after-tax return, and one would generally expect the risk adjusted return on CBIT investments to be the same. On the other hand, if payments of dividends and interest out of preference and foreign source income are taxable to investors, issuers with substantial preference and foreign source income may pay a higher return than issuers with substantial fully-taxed income.

If CBIT were adopted, special attention would have to be given to its impact on international capital flows.

Low-Bracket Investors

As discussed in Chapter 1, we have structured the CBIT prototype to impose a uniform 31 percent tax on earnings on capital invested in CBIT entities. However, the impact of CBIT on taxable equity holders and bondholders with marginal rates of less than 31 percent could be

lessened by providing those investors with a tax credit. This credit could be designed to give those investors a tax benefit equal to all or a portion of the difference between their marginal rate and the 31 percent CBIT rate. While the credit would not be refundable, it could offset tax on other income. The effect would be similar to full refundability for any investor with enough other tax liability to absorb the credit.³⁸ If a compensatory tax were not imposed, the credit would be available only for excludable payments.

The credit is essentially the same as the shareholder credit for low-bracket investors described in Section 2.D in the context of the dividend exclusion prototype. Because CBIT extends to both dividends and interest, the credit would be available to both equity holders and bondholders.

Example. Assume that a CBIT entity earns \$100 of income and pays \$31 in tax. It then distributes \$69 as interest to a bondholder with a marginal tax rate of 15 percent. Applying the formula set forth in Section 2.D (adjusted to reflect the 31 percent CBIT rate), a bondholder credit of \$16 (i.e., $\$69 \times .69 \times (.31 - .15)$) would produce a tax benefit equal to the difference between the bondholder rate and the CBIT rate.

Tax-Exempt Investors

Under the other prototypes described in this Report, denying refundability of corporate level taxes preserves the current law treatment of corporate equity owned by tax-exempt and foreign investors. Under CBIT, however, some offset for corporate level taxes would tend to move CBIT closer to current law by mitigating the additional tax burden the prototype places on interest earned by tax-exempt investors. As with low-bracket shareholders, the credit could be set at a rate that would refund either all or a portion of the tax imposed at the 31 percent CBIT rate. If a compensatory tax is not imposed, the credit would be available only for excludable payments.

Because tax-exempt investors have little or no tax liability, they would be unable to benefit from the nonrefundable investor credit described in the

preceding section. One possibility would make the investor credit described above refundable. An alternative approach would combine an investor level credit with a tax on investment income of tax-exempt entities. Under this approach, tax-exempt and foreign investors would be liable for tax on all investment income (interest, dividends, capital gains, rents, royalties, and other investment income). The rate of this tax could be set to produce overall revenues (taking into account the investor credit) equivalent to those currently borne by equity supplied by the tax-exempt sector. A tax-exempt entity could then use the investor level credit to offset the tax due on other investment income. See Section 6.D.³⁹

Imposing a tax on investment income and allowing a credit would treat CBIT and nonCBIT debt instruments alike (although it probably would not fully compensate for the interest rate differential between CBIT and nonCBIT debt). It generally would encourage tax-exempt entities to hold a mixture of CBIT and nonCBIT debt and equity, because the nonrefundable investor credit associated with CBIT debt and equity could be used to offset the tax due on other kinds of investment income. This approach would minimize differences between CBIT and nonCBIT investments, just as it could minimize differences between debt and equity under distribution-related integration.⁴⁰

Foreign Investors

The absence of special relief for foreign debt investors in the CBIT prototype reflects our judgment that elimination of the withholding tax on CBIT dividends and interest and elimination of the branch tax may balance the CBIT change as to debt, recognizing that, under CBIT, foreign investors may prefer nonCBIT debt to CBIT debt and CBIT equity to equity under current law.

Nevertheless, either of the mechanisms described for tax-exempt investors—a refundable credit or the investment tax and credit mechanism described in the preceding section—could be used to provide relief for foreign investors. A gradual phase-in of CBIT also would allow assessment of

the need for such mechanisms based on experience.

Impact of Relief Measures for Low-Bracket, Tax-Exempt and Foreign Investors on the CBIT Prototype

Our recommended CBIT prototype contains none of the relief mechanisms discussed in the preceding sections. Adoption of any of these mechanisms would result in a revenue loss which would have to be recovered elsewhere in the prototype or in other offsetting revenues not now required by the prototype. For example, a compensatory tax could be imposed. (The estimates for the CBIT prototype in Section 13.H do not include a compensatory tax.) In addition, the decisions to eliminate the branch tax and withholding taxes for foreign investors could be re-examined (although such a modification would be contrary to the goal of imposing a single level of U.S. tax).

4.G STRUCTURAL ISSUES

Current Law Interest Deduction Limitations Under CBIT

Under current law, interest paid or incurred by businesses generally is deductible. In special circumstances, however, the Code limits business interest deductions. These limitations serve several purposes, such as treating debt instruments with equity characteristics as equity, preventing mismatches in the timing of income and expense, and preventing tax arbitrage by borrowing to purchase tax-favored investments.

CBIT's elimination of the deduction for business interest by all but the smallest businesses could allow a major simplification in the Code by eliminating (or substantially reducing) the need for several provisions designed to prevent excessive and mismatched interest deductions. Thin capitalization will no longer be a tax concern. We believe the following Code sections could be repealed or substantially reduced in scope:

- IRC § 385 (granting Treasury the authority to define the distinction between debt and equity) and IRC § 279 (denying deductions for equity-like debt) would be repealed,
- IRC § 163(e)(5) and (i) (deferring interest deductions on high-yield discount obligations) and IRC § 163(j) (deferring excessive interest deductions on certain related-party debt—the anti-earnings stripping provision) would be repealed,
- IRC § 267(a)(2) (relating to matching of interest income and deductions between related parties) would no longer apply to interest paid by CBIT entities,
- IRC § 469 (the passive loss rules) and IRC § 465 (the at risk rules) would have no application to interest paid by a CBIT entity,
- IRC § 263A(f) (relating to capitalization of interest with respect to self-constructed assets and inventory) could be repealed, and IRC § 266 (the election to capitalize interest generally) could be repealed with respect to CBIT entities,⁴¹
- IRC § 1277 (restricting interest deductions allocable to accrued market discount) and IRC § 1282 (restricting interest deductions allocable to accrued discount) might no longer apply to interest paid by CBIT entities,
- IRC § 263(g) (requiring capitalization of interest and other costs of carrying a straddle) might no longer apply to interest paid by a CBIT entity,
- IRC § 265(a)(2) (disallowing deductions for interest incurred to purchase obligations bearing tax-exempt interest) might no longer apply to interest paid by a CBIT entity,
- IRC § 265(b) (relating to disallowance of interest deductions of financial institutions allocable to tax-exempt obligations) and IRC § 291(e)(1)(B)(ii) (an earlier version of IRC § 265(b) applicable for tax-exempt obligations acquired by financial institutions between 1982 and 1986) could be repealed,⁴² and
- IRC § 264(a)(2), (3), and (4) (denying interest deductions on certain debts relating to life insurance policies) might not apply to interest paid by CBIT entities.

CBIT will expand the scope of provisions, such as IRC § 265(a)(2) (which currently disallows deductions for interest on indebtedness

incurred or continued to purchase or carry obligations bearing tax-exempt interest) and IRC § 265(a)(1) (which currently disallows expense allocable to tax-exempt income other than interest), to apply to taxpayers who receive CBIT interest and dividends. While the expanded interest disallowance rules would not apply to CBIT entities, it would apply to individuals and small business entities to disallow interest on debt incurred or continued to purchase or carry equity or debt of CBIT entities.⁴³ Absent such expansion, much of the CBIT tax base would erode in tax arbitrage transactions illustrated by the following hypothetical example:

Example. Assume that, for each year of its operation, CBIT entity X earns \$1 million, pays \$310,000 in regular CBIT tax and pays the remaining \$690,000 as a dividend to individual A, its sole shareholder. The \$690,000 is not taxable to A.

Assume that A borrowed \$6,900,000 from tax-exempt entity C at 10 percent interest per year to purchase the X stock. If A is allowed a deduction of \$690,000 for interest paid, he can shelter up to \$690,000 in income from other sources while using his excludable CBIT dividends to pay the interest to C. C will pay no tax on the \$690,000 in interest it receives each year. If the \$690,000 deduction allowed to A shelters income otherwise taxable at 31 percent, \$213,900 of the tax paid by X will in effect be refunded to A. While the interest paid and dividend received in this example are equal, they need not be. If C is willing to loan A \$10 million against his X stock on the same terms, A's interest deduction, if used against other income, would fully offset the CBIT tax X paid with respect to the distribution to A.⁴⁴

Under current law, this is simply one of many opportunities for rate arbitrage through the issuance of debt by taxable issuers to tax-exempt and foreign lenders. CBIT, however, generally eliminates businesses' ability to pay interest to tax-exempt and foreign lenders without the payment of one level of tax. Thus, to prevent the erosion of the CBIT base, it is also necessary to prevent investor level rate arbitrage through borrowing.

Application of modified IRC § 265 would be equally appropriate if a compensatory tax is not

adopted and interest and dividends paid by CBIT entities out of preference income are taxable to investors. In either case, the potential for arbitrage is the same. See "Anti-abuse Rules" in Section 2.B.

Finally, some of the interest deduction limitations CBIT might eliminate may serve policies that would continue to be important but would require new mechanisms under CBIT. One example is current law's requirement that debt obligations be issued in registered form. Currently IRC § 163(f) denies a deduction for interest on unregistered obligations for which registration is required. This sanction would have no deterrent effect for CBIT entities because CBIT eliminates interest deductions. Because interest received from CBIT entities will not be taxed to the investor, the need for registration of debt instruments of CBIT entities for tax enforcement purposes will be greatly reduced. However, registration may be desirable for nontax law enforcement purposes, and replacement sanctions may be needed.⁴⁵

Identifying Disguised Interest

CBIT entities and their investors will be indifferent to the characterization of payments to investors as either interest or dividends, because neither will be deductible by the CBIT entity and neither will be taxable to the investor. However, tax tensions will remain and may be exacerbated by CBIT with respect to rent and royalty payments and allocations between principal and interest on the purchase of capital assets.

If the market rate of interest on CBIT debt does not fully reflect the nondeductibility of interest payments, it will generally be advantageous to a CBIT entity to restructure such payments, where possible, into deductible rental and royalty payments. Such a restructuring will generally be disadvantageous to taxable recipients since it will convert interest that is not taxed into taxable rents or royalties. No such tension will exist, however, if the recipient is a tax-exempt entity or a CBIT entity that is in a net operating

loss position. Similarly, CBIT entities can be expected to maximize principal and minimize interest payments on capital purchases, since asset basis will give rise to deductible cost recovery while interest payments are nondeductible. Again, taxable sellers may have opposing interests depending on how gains on asset sales are taxed.⁴⁶ As with rents and royalties, these tensions will not exist where the seller is tax-exempt or is a CBIT entity with a net operating loss.

CBIT therefore will put increased pressure on standards, such as those the Internal Revenue Service has developed, distinguishing finance leases (which are treated for tax purposes as loans and hence generate nondeductible interest for a CBIT entity) from true leases (which are respected as such for tax purposes and hence give rise to deductible rentals for CBIT entities).⁴⁷ We believe that it would be prudent in a CBIT regime to include standards for distinguishing interest from rents and royalties in the Code, modeling them on existing standards, such as those the Service has developed for leases, or on IRC § 467, which imputes interest to prevent uneconomic accruals of rent.⁴⁸

Purchase price allocations are inherently factual and governed by the standards of the market. While CBIT may change the tax stakes in such allocations, the problem presented is no different from that confronting the Internal Revenue Service in making fair market value determinations under current law. We do not contemplate that statutory change will be needed in this connection to implement CBIT.

The current original issue discount (OID) and imputed interest rules may be needed in order to distinguish interest from principal. For example, in the case of sales of property in exchange for debt, these rules are needed to determine the buyer's basis and the seller's amount realized.⁴⁹ Similarly, in the case of debt issued for cash, these rules are needed to distinguish payments of interest (which reduce the EDA and, when the EDA is exhausted, are subject to compensatory tax or investor level tax) from payments of principal.⁵⁰

Interest Not Subject to CBIT

CBIT does not dictate any change in the current taxation of interest paid on debt issued by a nonCBIT borrower. Thus, for example, home mortgage interest and personal investment interest incurred to carry nonCBIT assets would continue to be deductible by an individual borrower to the same extent as under current law and includable in the income of the recipient. Nonmortgage, personal interest would continue to be nondeductible by the borrower and includable by the lender. State and local bond interest would generally remain excludable from gross income to the same extent as under current law. Interest on Treasury debt would, as under current law, be includable in income by the recipient.⁵¹

One administrative issue raised by nonCBIT debt is tracking income and deductions related to such debt. For example, maintaining the current law treatment for home mortgage interest, interest on Federal debt, and debt issued by foreign and tax-exempt entities under CBIT will require special reporting rules to identify such interest as includable in income and to permit it to retain its special character when it is collected and distributed by a REMIC, REIT, or other passthrough entity.

Under CBIT, interest earned on bonds issued by State and local governments would retain its current exemption from tax,⁵² but interest income on debt issued by CBIT entities generally would be exempt. Under CBIT, the rate of interest on exempt state and local obligations may approximate the interest rate on corporate debt of similar risk and maturity. Thus, State and local governments might view CBIT as eliminating the borrowing advantage they currently enjoy relative to corporate issuers. State and local debt would, however, retain its advantage over Treasury and other nonCBIT debt such as home mortgages.

Pension Funds

As Section 2.G discusses, the immediate deduction for employer contributions to pension plans, combined with the deferral of income to

the employee until benefits are paid, effectively exempts the investment earnings on the contribution from tax. As a consequence, under current law pension fund investment earnings from investments in corporate stock bear only one level of tax—the corporate tax paid by the corporation. Investment earnings on pension fund investments in corporate debt, however, bear no tax at all under current law, because corporate income used to pay interest is not taxed at the corporate level.⁵³ Under CBIT, however, investment earnings from both CBIT debt and equity will be taxed at the payor level, with the consequence that pension plans will earn an after-tax return on such investments. The introduction of CBIT thus eliminates the deferral of tax on inside buildup.

The position of pension plan trusts under current law could be replicated in CBIT only by refunding the CBIT entity level tax on interest paid to pension trusts. This step would eliminate the need to revise pension tax rules, but would undermine CBIT's fundamental goals of treating debt and equity alike and collecting a uniform tax on business capital income regardless of the identity of the investor.

To equate the treatment of CBIT debt and equity investments by pension funds, we recommend requiring pension trusts to maintain separate accounts for CBIT income and other amounts, e.g., contributions and nonCBIT income,⁵⁴ to treat all distributions made each year as made proportionately from the income of each account, and to notify pension payees of the amount from each account included in their pension payments. Payees would be entitled to exclude from income pension distributions from the CBIT income account, thereby reducing the tax burden on corporate equity investments relative to current law.

Because pension trusts will enjoy no inside build-up advantage over other investors with respect to the CBIT assets they hold, CBIT might induce such trusts to alter their portfolio mix toward nonCBIT assets. The degree to which this occurs depends on the relationship of CBIT to nonCBIT yields and the portfolio and diversification advantages of particular investments.

If a compensatory tax were not adopted, pension funds would add only excludable CBIT income to the CBIT income account. In general, taxing distributed preference income at the investor level, rather than imposing a compensatory tax, would lessen the extent to which adoption of CBIT removes the tax-free inside build-up on CBIT investments.

Subchapter C Recognition and Reorganization Rules

As in the dividend exclusion prototype, the CBIT prototype retains the basic rules of Subchapter C governing the treatment of taxable and tax-free corporate asset and stock acquisitions. CBIT entity gain on asset sales would be taxable to the CBIT entity and payment of tax on the gains would give rise to additions to the EDA, thereby permitting distribution of the after tax proceeds of such asset sales to investors without further tax. As in the dividend exclusion prototype, the Subchapter C reorganization rules would be retained, and no special limitations analogous to IRC §§ 382 and 383 would apply to the EDA. See Section 2.F. As in the dividend exclusion prototype, EDAs would be combined in acquisitive reorganizations and allocated in divisive transactions. Liquidations would generally be treated as in the dividend exclusion prototype. A liquidating entity's EDA would generally be allocated among equity holders in proportion to the amount of other assets distributed to them, and any gain would be excludable to the extent of the allocable EDA.⁵⁵

In CBIT, however, partnerships are treated as CBIT entities. Imposing Subchapter C structural rules on partnerships would change current law significantly by eliminating the partnership rules found in IRC §§ 731-732 which permit tax-free distribution of partnership property to partners.⁵⁶ While the CBIT prototype contemplates that the existing Subchapter C recognition rules for distributions ultimately should be applied to all CBIT entities, policymakers concerned about the implications of such a rule on changes in the organization form of smaller CBIT enterprises could create carryover basis exceptions to the

Subchapter C recognition rules for smaller CBIT entities.⁵⁷

Capital Gains, Dividend Reinvestment Plans, and Share Repurchases

If a compensatory tax were adopted, a full exemption of investor level gains and losses on equity and debt could be viewed as consistent with CBIT's exemption of investor level tax on dividends and interest. However, the fundamental problem of capital gains taxation in CBIT is similar to that encountered in other integration prototypes and either resolution (to tax or to exempt capital gains) will be controversial. See Chapter 8. If capital gains are taxed under CBIT, corporations might implement a dividend reinvestment plan (see Chapter 9) to reduce the incidence of double taxation on retained earnings. The appropriate treatment of share repurchases under CBIT also depends on treatment of capital gains. See Section 8.E.

4.H CONDUITS

Treatment of Conduits under CBIT

Current law exempts certain organizations from entity level tax. These entities function as tax conduits; they either are granted complete passthrough status or are taxed only on their undistributed income. Partnerships generally are granted passthrough status if they meet certain classification tests that distinguish them from corporations.⁵⁸ Certain publicly traded partnerships are always treated as corporations.⁵⁹ Regulated investment companies (RICs) are taxable corporations but are allowed a deduction for dividends paid out of both ordinary income and capital gains.⁶⁰ A typical RIC is a mutual fund that makes diversified investments for its shareholders. Real estate investment trusts (REITs) are taxed similarly to RICs but are restricted to investing predominately in real estate.⁶¹ Real estate mortgage investment conduits (REMICs) are entities that hold fixed pools of mortgages and have both regular interests, providing for fixed, unconditional payments and taxed as debt, and a

single class of residual interests, taxed essentially like equity interests in a partnership.⁶² Holders of REMIC residual interests are taxed on their pro rata share of the REMIC's net income.

A cooperative, generally, is an organization that transacts business with and for its patrons (owners). Some cooperatives enjoy a limited exemption from tax. Subchapter T cooperatives are treated as corporations under current law but are allowed a special deduction for patronage dividends and per unit returns allocated to patrons based on business activity. While this results in effective conduit treatment of patronage distributions and allocations, other earnings of a cooperative are subjected to corporate taxation.⁶³ Typical cooperatives include farmers' cooperatives that purchase farmers' crops, sell them, and remit the proceeds to the farmers or purchase feed and seed for resale to farmers. Other cooperatives include grocery, hardware, drug, book, and clothing stores that operate on a cooperative basis.

Conduits that are not taxable entities under current law could continue as such under CBIT or could be treated as CBIT entities. To the extent that a conduit holds only CBIT equity or debt, its status as a conduit is irrelevant. A RIC, for example, that holds only CBIT bonds would pay no entity level tax even if it were treated as a CBIT entity, because all of its interest income and capital gains would be exempt from tax. Any dividends paid to shareholders also would be exempt from tax. Conduit status would be equally irrelevant, whether CBIT included a compensatory tax or instead imposed tax at the investor level on distributions out of preference income. See Section 4.D.

Thus, the treatment of nonCBIT income earned by conduits is the principal issue in deciding whether conduits should retain their passthrough status. One of the principal purposes for conduit status under current law is to provide relief from the double tax applicable to corporations. Because CBIT subjects corporate income only to a single level of tax, CBIT might replace the need for conduits. In addition, retaining conduit status for some entities would provide a

means for avoiding the CBIT regime. Conduit status permits income to be taxed at shareholders' rates (which, for tax-exempt shareholders, may be zero), rather than at the CBIT rate. Thus, there would be an incentive to have nonCBIT assets held through a conduit rather than through a CBIT entity.

Partnerships

The CBIT prototype treats partnerships as CBIT entities in order to avoid perpetuating the bias against doing business in the corporate form. Exempting partnerships from CBIT would create incentives for investors to choose the partnership form whenever the tax benefits of passthrough treatment outweighed the business costs of operating in partnership rather than corporate form.

Example. A group of investors (including some tax-exempt organizations) is considering undertaking a business venture. The investors decide to conduct business through a partnership rather than a CBIT entity so business income will be taxed at the investors' rates rather than at the CBIT rate.

By removing taxes from the determinants of organizational form, CBIT enhances neutrality.

In general, under CBIT, partnerships that do not qualify for the small business exception described in Section 4.C would be taxed like other CBIT entities. Thus, a partnership would be subject to entity level tax each year on its earnings (computed under the normal corporate tax rules but without a deduction for interest), but would not allocate earnings to equity holders. Like other CBIT entities, a partnership would maintain an EDA and would track actual distributions (rather than allocations of income) to partners and interest payments on debt. Distributions and payments in excess of the EDA would be subject to compensatory tax (or investor level tax).⁶⁴

Subjecting partnerships to CBIT may treat certain types of partnership income less favorably than under current law. For example, partnership income would be subject to tax at the CBIT rate, rather than at the partners' individual rates.

Partnership losses, preference income, and foreign tax credits would no longer pass through to partners. Distributed preference income and sheltered foreign source income would be subject to compensatory tax (or investor level tax). If these results are undesirable, policymakers may wish to expand the class of partnerships that are exempt from CBIT beyond the small business exception discussed in Section 4.C. However, the advantages of doing so should be weighed against the costs of retaining tax incentives favoring noncorporate forms of organization.

RICs, REITs, and REMICs

The analysis for these special purpose pass-through entities may be somewhat different, however. There is an argument that they should retain conduit status because they serve an important function as pooled investment vehicles for small investors. To the extent that individuals and tax-exempt organizations could purchase and hold nonCBIT investments, e.g., home mortgages, Treasury securities, and tax-exempt bonds, directly, they should be permitted to do so indirectly through a RIC or REIT.

Example. A CBIT corporation would like to issue new shares in order to purchase a new building. Corporate earnings used to pay dividends on those shares would, however, bear tax at the CBIT rate. The corporation decides instead to lease its new building from a REIT, which issues shares to fund the purchase. As a consequence, the corporation can deduct the payments of rent, and dividends paid by the REIT are taxed at shareholder rates.

While the preceding example might be viewed as avoidance of CBIT, the incentives to engage in this form of transaction under current law are as strong as they would be under CBIT. In addition, given a decision to simplify CBIT by making it a 31 percent tax on all capital income, it might be considered worthwhile to maintain investment opportunities for low-bracket investors that will bear tax at the investor's tax rate rather than the CBIT rate.⁶⁵ Maintaining conduit status for RICs, REITs, and REMICs will require the expansion of IRC § 265(a)(3) to deny such conduits the ability to deduct expenditures related to the purchase or carrying of CBIT assets. With this

modification, however, it should be possible to retain current rules for such entities. This approach will make enforcement of the leasing standards discussed under "Identifying Disguised Interest" in Section 4.G particularly important in maintaining the CBIT base.

Given the decision to treat partnerships generally as CBIT entities, it may be appropriate to make changes in the REIT qualification rules to allow entities with fewer than 100 shareholders and state law partnerships to qualify as REITs for tax purposes. This would avoid conferring an advantage on large, corporate REITs in real estate investing. Similar relaxation of the RIC qualification rules might be considered.

Cooperatives

We believe the limited conduit status granted to Subchapter T cooperatives would continue to be the appropriate model for cooperatives under CBIT. Cooperatives would thus be CBIT entities but could deduct patronage dividends.⁶⁶ As under current law, patronage dividends would generally be includable in the patron's income.

4.I FINANCIAL INTERMEDIARIES UNDER CBIT

Financial intermediaries include depository institutions, insurance companies, investment banks, and other financial services entities. Although the specific services provided by these institutions vary, financial intermediaries generally solicit funds from investors, depositors, and other lenders and use these funds to make loans or to acquire the debt and equity issues of other companies. Thus, financial intermediaries earn most of their income in the form of dividends and interest and tend to have substantial noninterest expense that is incurred to produce net interest and dividend income and gains on securities.

The following analysis suggests the basic outlines of the taxation of financial intermediaries under CBIT, although further consideration should

be given to these issues during the period CBIT is under discussion.⁶⁷

Financial Institutions Generally

CBIT would exempt from tax much of the income received by financial institutions because it is received in the form of dividends and interest from CBIT entities. In addition, if financial institutions were treated as CBIT entities, their interest expense would no longer be deductible. This raises the question of how other operating expenses of financial institutions should be treated. We have generally recommended that IRC § 265(a)(1) and (2), which operate to disallow deductions and interest allocable to tax-exempt income, be extended to cover investment in equity and debt of CBIT entities. Given the large portion of financial institution income that can be expected to come from CBIT investments as well as from tax-exempt State and local government bonds, this general rule would operate to disallow a significant portion of their operating expenses if deductions for such expenses were not allowed.

This effect is likely to be less significant for direct lenders such as banks and finance companies because they would no doubt begin to charge fees (rather than interest) to cover the costs of making a loan (as contrasted with the institution's cost of funds). Indeed, provisions requiring the borrower to pay the lender's transaction costs such as attorney's fees, filing fees, survey and appraisal expenses, inspection costs and similar items are already a common feature of negotiated loan transactions. The advantage of converting interest income into fee income would be that a CBIT borrower could deduct fees but not interest. Although the fee income will be includable in the income of the CBIT lender, the lender will be permitted to deduct operating expenses against such income without disallowance under expanded IRC § 265. Thus, recharacterizing interest income as fees may permit better matching of a financial institution's income and expenses. This strategy, however, is likely to be less successful with respect to publicly traded instruments of CBIT entities, where the intermediary, in many

instances, will be unable to negotiate borrower fee payments to cover its operating expenses. Given the prevalence of commissions and fees in the compensation paid to investment banks and securities trading entities, however, it may be that market adjustments in these amounts would solve the problem for these entities.

For revised IRC § 265(a) rules to function as described in this section, mechanical provisions which match operating expenses with related fee, commission, and reimbursement income will be necessary. In particular, a proportional allocation rule such as that found in current IRC § 265(b) would produce inappropriate results if CBIT income were included in the fraction. Instead, financial institutions should be allowed to allocate operating expenses fully to offset fee income. To the extent that fee income is insufficient to cover operating expenses, the residual expenses would be allocated between CBIT and nonCBIT income under the pro rata rule of IRC § 265(b) and the portion allocable to CBIT income could be disallowed under IRC § 265(a).

Alternatively, financial institutions could be exempted from the disallowance rule of expanded IRC § 265(a) with respect to their operating expenses.⁶⁸ This approach would increase the incentive for such institutions to generate sufficient nonCBIT income (through investments in Treasuries, home mortgages, consumer debt, and leasing activities) to absorb fully the portion of their operating expenses in excess of their fee income. Our analysis indicates that most financial institutions currently hold enough nonCBIT debt to achieve this result; accordingly, the impact of such an approach on actual investment patterns is likely to be minimal. However, there is no relationship between the nonCBIT income and the expenses related to CBIT investments; hence, the allowance of a full offset may reduce other income, rather than matching nonCBIT income.⁶⁹

Savings and Loan Associations

Savings and loan associations (S&Ls) must invest heavily in home mortgages to maintain their qualification for special tax rules. Assuming

these requirements were maintained under CBIT, S&Ls would receive primarily taxable income but receive no deduction for interest paid to depositors. There should be a significant spread, however, between the interest rates paid on home mortgages (because recipients will pay tax on such interest) and the interest rates paid to depositors (because the depositor will not be subject to tax on interest received from the S&L as a CBIT entity). This spread may be sufficient to allow S&Ls to satisfy their CBIT liabilities, and, if so, no special rules will be needed. Again, a gradual transition to CBIT would allow policymakers to study the observed impact of CBIT before finally resolving structural decisions. Because the need for a special rule for S&Ls is not clear, the CBIT prototype does not include such a rule.

If experience proves that the rate differential between interest on home mortgages and interest on CBIT deposits is insufficient to allow S&Ls to operate successfully, consideration could be given to allowing S&Ls to issue certificates of deposit that would bear taxable interest to the recipient and deductible interest to the S&L. Even such a limited provision would undermine somewhat the tax parity between debt and equity achieved by CBIT, however, and should be adopted only if it proves necessary.⁷⁰

Insurance Companies

Under the CBIT prototype, insurance companies would be CBIT entities.⁷¹ Like other CBIT entities, they would not be allowed a deduction for interest paid, but distributions to shareholders and creditors would not be taxed to the recipients.⁷² Under CBIT, IRC § 809 (which Congress intended to equalize the treatment of stock and mutual companies' equity returns) would be repealed, since equity returns from both stock and mutual companies would be exempt to the recipient under CBIT. In both types of companies, payment of tax on earnings from surplus would give rise to an EDA permitting distributions free of further tax to investors. Distributions in excess of the EDA would trigger the compensatory tax or an investor level tax, but would preserve the equal treatment of investors.

CBIT will, however, require an adjustment in the deduction permitted insurance companies for annual additions to reserves. Under current law, tax reserves are calculated on a discounted basis. Accordingly, the deduction for reserve additions each year consists of two components: (1) the discounted present value of amounts required to fund future casualty and benefit payments plus (2) the expected return for the year on reserve funds. This system permits companies to claim deductions currently rather than deducting the entire loss or claim when paid. The difference between the present value of such losses or claims and the full (or nominal) value of such payments is deducted each year as expected return until the loss or claim is actually paid. The rate used to compute expected return under current law is based on the applicable Federal rate (AFR), which reflects a taxable rate of return.

Under CBIT, reserves would be calculated with a blended market interest rate, which would be a prorated average of a taxable nonCBIT rate and a non-taxable CBIT rate, according to the mixture of assets held by each insurance company. To the extent that reserve assets are invested in CBIT securities, no deduction to shield expected return on CBIT entity dividends and interest received by an insurance company would be appropriate because such amounts would not be

included in its income and would increase the insurance company's EDA. Accordingly, insurance companies would be required to maintain CBIT and nonCBIT income accounts similar to those of pension funds under CBIT. As with pension funds, insurance companies would be required to treat their expected return on reserves as arising pro rata from the CBIT and nonCBIT income accounts. An annual deduction for expected return would be permitted only to the extent attributable to nonCBIT income. As a result of this modification, insurance companies should neither obtain new benefits nor lose current law benefits with respect to their nonCBIT investments. While insurance companies would pay no tax on dividends and interest received from CBIT entities, they would enjoy no advantage over other investors in this respect.

The prototype's preservation of reserve deductions to prevent entity level taxation of the inside build-up (the income earned on reserves held in nonCBIT assets) may be regarded as inconsistent with the neutrality principles underlying CBIT, since the prototype may lead insurance companies to prefer nonCBIT investments which benefit from this advantage. We believe, however, that a different rule is not necessary for CBIT to function effectively and would require reversal of long-standing policies underlying insurance taxation.

PART III: PRINCIPAL ISSUES

INTRODUCTION

Each of the systems of corporate integration considered in this Report would move the U.S. tax system in the direction of more neutral taxation of capital income and, in so doing, reduce current tax-induced distortions in the allocation of capital. All the systems of corporate integration would substitute a single level of tax for the existing two level classical corporate tax system. The CBIT prototype also would eliminate tax distortions in the choice between corporate and noncorporate forms of business organizations by taxing all business income uniformly, at entity level tax rates.

Each of the systems of corporate tax integration is economically equivalent if income earned by corporations and individuals were taxed at the same tax rate, all income earned by corporations were treated the same, and all investors were taxed at the same tax rates.¹ But they are not.² The existence of differing tax rates among individuals and between corporations and individuals, tax preferences for a variety of kinds of income and deductions, domestic tax-exempt and foreign suppliers of capital, and foreign source income earned by U.S. corporations create significant differences among basic systems of integration. These circumstances also raise fundamental structural issues that must be addressed within the context of each of the integration systems. How these issues are resolved in an integrated corporate tax system significantly affects the choices among the basic integration alternatives and, ultimately, the efficacy of the method chosen in reducing or eliminating the distortions associated with the classical corporate tax system.

Transition rules also must be addressed in any integration proposal. The speed and administrative ease with which integration can be implemented, the degree of distortion experienced during the

transition period, and the revenue impact of different rules may affect the feasibility and the desirability of different integration prototypes.

These issues raise important and controversial issues of tax policy apart from their effects in structuring an integrated corporate tax system. Current law reflects compromises among goals of economic efficiency, equity in taxation, and other political, social, or economic policy goals (including furthering, for example, specific categories of investment) as well as the coordination of taxation across international borders.

The appropriate connection between such policy considerations and the construction of an integrated corporate tax system is further complicated because the Internal Revenue Code to date has addressed questions concerning tax preferences, tax-exempt suppliers of corporate capital, international considerations, and tax rates only in the context of a classical corporate tax system, not within the structure of an integrated system. Indeed, in some cases, provisions of current law have been enacted, at least in part, to redress the burdens of the classical corporate tax. Therefore, the treatment of these specific issues under current law may or may not be the appropriate benchmark for resolving the issue under an integrated system. On the one hand, current law tax rules have had a major impact on economic decisions and have shaped a wide variety of existing financial arrangements; care must be exercised so unwarranted disruptions do not occur in moving to an integrated corporate tax system. On the other hand, the resolution of these issues may have considerable influence on the degree of success of an integrated corporate tax system in removing the distortions of the existing system. Our task, therefore, has been to approach these issues in a manner that advances this Report's fundamental

objective—more neutral taxation of capital income—where practical, without demanding that a move from a classical to an integrated corporate tax system be accompanied by a comprehensive reevaluation of such fundamental issues as the treatment of tax preferences or international business transactions.

Although this part discusses these issues as discrete topics, they are often interrelated. For example, decisions regarding the use of tax preferences may affect decisions concerning the treatment of tax-exempt shareholders, and decisions concerning tax-exempt shareholders may influence policies regarding foreign investors.

CHAPTER 5: TREATMENT OF TAX PREFERENCES

Under current law, the Code provides favorable treatment that is generally recognized as deviating from standard accounting rules for particular items of income or expense.¹ These tax preferences may take the form of exclusions of income or preferential rates for items of income, accelerated deductions or deferred income recognition rules or credits. Some preferences (like the exclusion for interest on certain state and local bonds) create a permanent reduction of tax liability. However, most corporate preferences (like accelerated depreciation) offer deferral of tax, rather than outright exemption.

Under current law, there are two mechanisms for restricting the use of business tax preferences: the earnings and profits rules and the corporate and individual minimum tax provisions. The earnings and profits rules define the pool of corporate earnings that is taxable as dividends (rather than as a return of basis or as capital gain) when distributed to shareholders. Earnings and profits are calculated to include most corporate tax preferences. Thus, income that is tax-preferred at the corporate level is generally subject to tax when it is distributed to noncorporate shareholders.² Thus, under current law, tax preferences may provide corporations with retainable, but not necessarily distributable, tax-preferred funds.

A strengthened minimum tax for both individuals and corporations was a central feature of the Tax Reform Act of 1986. Under current law, the alternative minimum tax (AMT) is payable only if the computation of the minimum tax produces a tax greater than the tax due under the regular computation. For individuals, the AMT is imposed at a 24 percent rate on an expanded tax base that includes most tax preference items. In the case of corporations, the AMT is imposed at a 20 percent rate on a tax base that includes a broad list of tax preference items. The corporate minimum tax serves to limit the capacity of tax preferences to reduce tax on retained, as well as distributed, earnings.

The expanded tax bases for the AMT and the relatively narrow rate differentials between the regular and minimum taxes make the minimum tax provisions of current law a powerful revenue source with widespread impact on the tax planning of both high-income individuals and corporations. If the corporate AMT were repealed, a significant increase in the corporate tax rate would be required to offset the revenue loss. The minimum tax provisions not only raise revenue directly but also serve to increase the regular income tax paid by individual and corporate taxpayers who limit their use of preferences to avoid being subject to the AMT.

In integrating the corporate and shareholder income tax systems, the fundamental question about tax preferences is the continuing role of limitations on corporate tax preferences. Some commentators have suggested that integration implies giving to shareholders tax reductions due to corporate level tax preferences.³ They argue that if integration is to achieve tax neutrality between corporate and noncorporate investments, extending preferences to shareholders is appropriate. The cost of not extending to shareholders preferences that are available to noncorporate businesses is retaining a bias against the corporate form for any activities that are granted tax preferences. Such activities will tend to be performed by noncorporate firms. As discussed in Chapter 1, an economic loss results to the extent that such activities could be carried on by corporations at lower costs.⁴

With respect to deferral preferences, such as those permitting rapid depreciation or amortization of capital expenditures, some analysts regard distribution of the related income to shareholders as the appropriate occasion for ending tax deferral and view the earnings and profits provisions of current law as appropriately serving that function. Retaining the approach of current law and taxing preferences when distributed to shareholders would continue some disadvantages for

distributed, as opposed to retained, earnings, but this could be mitigated by treating distributions as coming first from fully-taxed income. Where corporate tax preferences are intended to alleviate the classical system's double taxation of equity income, they serve no function in an integrated system and, at a minimum, should not be passed through to shareholders. Some analysts, for example, consider the reduced rate on the first \$100,000 of corporate income as a tax preference intended to reduce the degree of double taxation for small corporations that decline to elect (or are ineligible for) S corporation status.

In addition, there are substantial revenue costs to extending corporate level preferences to shareholders just as there are in cutting back on the AMT.⁵ The revenue cost of extending preferences to shareholders or limiting the impact of the AMT would increase the cost of corporate integration, require higher tax rates to produce equivalent revenues, and, in effect, increase the value of tax preferences relative to taxable income. Maintaining current law restrictions on tax preferences would reduce the need to raise tax rates and thus reduce the efficiency costs associated with such rate increases.⁶ Hence, the issue of the proper treatment of preferences involves a comparison of these possible costs with the benefits provided by the preferences in an integrated world.

Finally, if a goal of integration is to tax corporate income once, corporate tax preferences should not be extended to shareholders. In an integrated system, extending preferences to shareholders may eliminate both the individual level and the corporate level tax. Foreign systems generally do not allow corporate preference income to be distributed tax-free to shareholders. Belgium, Canada, Denmark, and Japan are exceptions.⁷

Integration of the corporate and individual tax systems provides an opportunity to review both corporate and noncorporate tax preferences to

determine whether they are justifiable in an integrated system, but such a comprehensive review of tax preferences is beyond the scope of this Report. This Report concludes, however, that, where practical, integration of the corporate tax should not become an occasion for expanding the scope of tax preferences. Neither equity nor economic efficiency would be enhanced by such an expansion.

In practice, this conclusion implies that in a distribution-related integration prototype, specific mechanisms must be devised to play a role similar to the earnings and profits provisions of current law to ensure that preferences are not extended to shareholders. Similarly, the role and function of both the corporate and individual AMT must be reexamined to prevent the extension of the scope of current tax preferences.

A simple dividend exclusion or shareholder imputation credit method of distribution-related integration will not produce the desired result with respect to preference income.⁸ Integrated tax systems outside the United States that do not extend corporate tax preferences to shareholders have principally relied on either or a combination of two mechanisms.⁹ The first is an imposition of corporate level tax on the distribution of preferences through a compensatory tax system.¹⁰ The second is a tracing mechanism or overall limitation that restricts the amount of relief from tax at the shareholder level to actual corporate level taxes paid.¹¹ The limitation mechanism eliminates the benefit of preferences on distributed income by imposing tax at the shareholder rate on distributed preference income. The two methods can vary significantly when the shareholder tax rate differs from the corporate tax rate, and would, for example, impose very different tax burdens on distributions of corporate preference income to tax-exempt shareholders.¹²

The choice between the two mechanisms is a close one and a different alternative may be more appropriate depending on the method of

integration adopted. In the distribution-related integration prototypes described in this Report, we have recommended limiting tax relief at the shareholder level to the amount of corporate taxes paid and imposing shareholder level tax on distributed preferences. Under the dividend exclusion prototype, this is accomplished by requiring corporations to keep an account limiting

excludable dividends.¹³ In CBIT, this mechanism also is possible; on the other hand, since all tax is paid at the entity level, a compensatory tax may have more appeal.¹⁴ We conclude that it is not practical to attempt to retain the current law tax on distributed preference income under the shareholder allocation prototype.¹⁵

CHAPTER 6: TAX-EXEMPT AND TAX-FAVORED INVESTORS

6.A INTRODUCTION

Current law defines many different types of tax-exempt entities (including pension funds, charities, hospitals, educational institutions and business leagues) and imposes various conditions in order for them to obtain or retain their tax-exempt status (including nondiscrimination rules, minimum payout requirements, limitations on maximum contributions and restrictions on investments). Tax exemption is generally limited to income received by the entity that is either passive in nature or substantially related to an exempt function.

Tax-exempt entities may be grouped into two general categories. One group, which includes pension funds, 401(k) plans, and similar plans (collectively, pension funds), is characterized by an exempt entity that holds claims to property on behalf of specific individuals, with the earnings of the fund untaxed as earned but taxed when distributed to the individuals. The second group, which includes charities, hospitals, educational and religious institutions, is characterized by investment income that does not inure to the benefit of any particular individuals.¹

Tax exemption provides both groups with a higher after-tax rate of return on investment income than if the earnings were currently taxable. Retirees receive higher after-tax retirement income than if pension fund earnings were taxed currently or they had invested in taxable savings plans themselves, and charities and educational institutions can provide more services or activities than if the income on their assets were taxable. Despite the differences in the mechanics of taxing pension funds and other exempt entities, the present value benefit is the same. The pension fund tax exemption, employer deductibility of contributions to the fund and deferral of employee tax is equivalent to simply exempting from income tax the pension fund's investment income.²

The Code exempts these entities from income tax on all receipts other than net income from a business unrelated to the entity's exempt purpose. Such unrelated income, whether earned directly or through a partnership, is subject to the unrelated business income tax (UBIT), which generally is calculated under the regular corporate income tax rules.³ The tax generally applies only if the business income is unrelated to the organization's exempt purpose. Thus, engaging in a particular activity might result in the imposition of UBIT on one type of exempt organization but not on another. The Federal Government and State and local governments or their instrumentalities (except colleges and universities) are exempt from all tax including UBIT. The Code explicitly excludes income from certain passive investments from UBIT, including dividends, interest, rent from real property, royalties, and gains from the sale of capital assets. Despite the general exclusion, passive income generally is subject to UBIT to the extent that it is financed with debt.

The tax-exempt sector plays a major role in U.S. capital markets, and in the corporate capital market in particular. At the end of 1990, pension funds and other exempt organizations held over one-quarter of total financial assets in the United States (Table 6.1). Holdings of the tax-exempt sector represented even larger fractions of corporate equity and corporate debt—approximately 37 percent of directly held corporate equity and 46 percent of outstanding corporate debt.

Pension funds dominate tax-exempt sector corporate investments, holding more than one-quarter of all directly held corporate stock and more than two-fifths of corporate bonds. Figure 6.1 illustrates the dramatic growth in the share of corporate debt and equity held by pension funds since the 1950s. As the share of corporate capital held by pension funds has grown, an increasing share of the associated corporate income has avoided the investor level tax.

Table 6.1
Financial Assets of the Tax-Exempt Sector
End of Year 1990

	Total Credit Mar- ket Assets ¹		Corporate Equity		Corporate Debt ²	
	(billions of dollars)	(percent)	(billions of dollars)	(percent)	(billions of dollars)	(percent)
Foreigners	1,636	12	218	6	203	12
Pension Funds ³	2,695	19	967	28	722	44
IRAs & Keoghs ⁴	560	4	141	4	11	1
Nonprofit Institutions ⁵	515	4	130	4	10	1
Total Tax-Exempt Sector	5,450	39	1,457	43	946	58
Total All Sectors	13,996	100	3,416	100	1,629	100

Department of the Treasury

Office of Tax Policy

¹Total Credit Market Assets: total credit market debt owed by domestic nonfinancial sectors plus corporate equities (excluding mutual funds).

²Corporate Debt includes some foreign bonds. The total amount includes bonds held by the financial sector.

³Pension Funds include private pension funds (including Federal Employees Retirement Thrift Savings Fund), state and local government employee retirement funds, and pension fund reserves held by life insurance companies.

⁴Individual Retirement Accounts (IRAs) and Keogh accounts: figures estimated.

⁵Nonprofit institutions include charitable, educational, and similar institutions. Estimated as percent of household holdings in Flow of Funds.

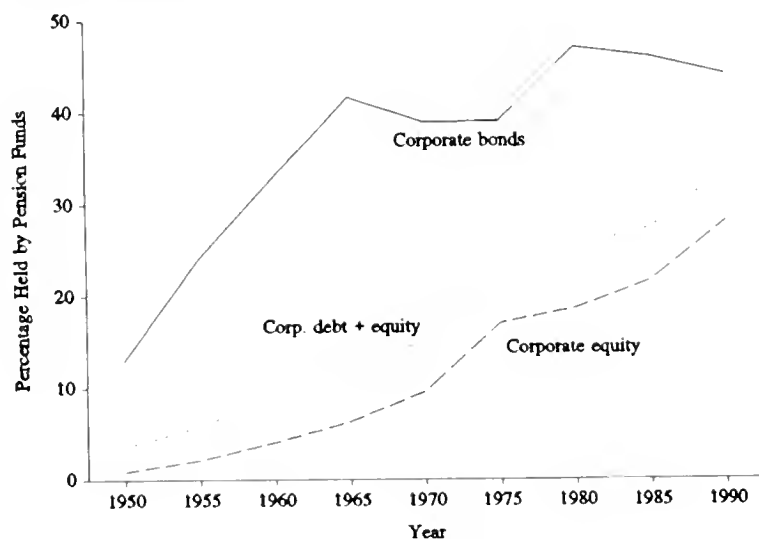
Sources: Federal Reserve Board, *Flow of Funds* (March 1991 revised); Investment Company Institute, *Mutual Fund Fact Book* (1991), p. 60; and Office of Tax Policy calculations.

Under current law, tax-exempt investors, in fact, are not exempt from the corporate level tax on income from their corporate equity investments. Although dividends paid to tax-exempt shareholders are not taxed to the recipients, the earnings attributable to such investors are taxed at the corporate level whether or not distributed. By contrast, corporate earnings paid to tax-exempt investors as interest escape both the corporate level tax and the investor level tax.

The fundamental question addressed here is whether under an integrated tax system this treatment of corporate income of tax-exempt investors should continue, or, alternatively, whether tax-exempt investors should be subject to a tax increase or receive a tax reduction from integration. The current level of taxation of corporate equity income received by tax-exempt investors can be retained under integration as demonstrated in this Report. Integration does not necessarily require either an increase or a reduction in tax on income from capital supplied by tax-exempt entities to corporations.

On the other hand, corporate integration presents an opportunity to reexamine the incentives under current law for tax-exempt investors to prefer

Figure 6.1
Pension Fund Holdings of Corporate Capital, 1950-1990



Sources: Hoffman (1989) and calculations based on Federal Reserve Board, *Flow of Funds* (March 1991 revised).

debt rather than equity investments in corporations. The specific question raised by corporate integration is whether the current distinction in the treatment of corporate equity investments by tax-exempt entities (which bear the corporate, but not the shareholder level tax) versus corporate debt investments (which bear neither corporate nor debtholder level tax) should be retained or decreased. An integration system best fulfills its goals if it provides uniform treatment of debt and equity investments by tax-exempt investors. Equating the tax treatment of debt and equity will require either an increase or decrease in the taxes on corporate capital supplied by tax-exempt investors or the introduction of a separate tax on investment income of these investors. As Section 6.D discusses, such a tax could be designed to maintain the current level of tax on income from corporate capital supplied by tax-exempt investors while equalizing the treatment of debt and equity.

6.B DISTORTIONS UNDER CURRENT LAW

Current law encourages tax-exempt investors, like taxable investors, to invest in debt rather than equity. Only two types of income from capital supplied to corporations by tax-exempt entities are actually tax-exempt. Interest paid by corporations is both deductible by the corporate payor and exempt from tax in the hands of the tax-exempt recipient. Corporate preference income distributed to tax-exempt shareholders also is exempt from tax at both the corporate and the shareholder level.⁴ Non-preference income is taxed at the corporate level, but is not taxed at the shareholder level whether it is received by the exempt investor as capital gains from the sale of shares or as dividends from distributions. Thus, under current law, corporate income paid to tax-exempt investors in the form of interest is not taxed at either the corporate or investor level, while non-preference income retained or distributed to tax-exempt shareholders is subject to tax at the corporate level.

Current law does not, however, encourage tax-exempt investors to invest in equity of

noncorporate rather than corporate businesses, because, in both cases, the income is subject to one level of tax. While corporate income (other than preference income) allocable to tax-exempt shareholders is subject to tax at the corporate level, the noncorporate unrelated business income of tax-exempt investors generally is subject to UBIT.⁵ For tax-exempt investors who invest in equity, current law generally also does not affect their preferences for distributed or retained earnings. Because corporate income (other than preference income) is subject to current corporate level tax and both distributed and retained earnings are exempt from tax at the shareholder level, a tax-exempt shareholder has no tax incentive to prefer distributed earnings over retained earnings.

6.C NEUTRALITY UNDER AN INTEGRATED TAX SYSTEM

Because of the asymmetric treatment of debt and equity investments by tax-exempt entities under current law, an integrated system can achieve neutrality between debt and equity investments for tax-exempt investors only by either decreasing the tax burden on equity income or increasing the tax burden on interest. A straightforward decrease in the tax burden on equity investments might be accomplished by removing the corporate level tax on earnings distributed as dividends to tax-exempt investors. A deduction for corporate dividends, for example, would achieve this result. The contrary approach might subject interest income on corporate debt earned by tax-exempt investors to one level of tax (at either the corporate or the investor level).

The first approach, taxing neither dividends nor interest paid to tax-exempt investors, would lose substantial amounts of tax revenue relative to current law. Extending the benefits of integration to tax-exempt investors would add costs of approximately \$29 billion annually under distribution-related integration and approximately \$42 billion annually under shareholder allocation. This revenue loss would increase the costs of integration and would require offsetting increases in other taxes or in tax rates, which might create or increase other distortions. This approach also

would distort the choice between corporate and noncorporate investment for tax-exempt investors if UBIT remained in place for noncorporate investment. If corporate dividends were tax-exempt at both the corporate and investor level, while earnings from businesses conducted directly or in partnership form were subject to UBIT, a tax-exempt investor would always prefer corporate dividends. Indeed, anti-abuse rules might be required to preclude tax-exempt organizations from avoiding UBIT altogether simply by incorporating their unrelated businesses.

The second approach, taxing both interest and dividends at a single rate, would reduce the current advantage of tax-exempt investors relative to taxable investors. Tax-exempt investors would no longer enjoy an after-tax return on a given corporate equity or debt investment higher than that available to taxable investors. The principal advantage of this approach is that it would equate the treatment of debt and equity while maintaining the neutrality between corporate and noncorporate equity for tax-exempt investors.⁶

6.D GENERAL RECOMMENDATIONS

This Report recommends that a level of taxation at least equal to the current taxation of corporate equity income allocated to investments by the tax-exempt sector be retained under integration. The dividend exclusion prototype, described in Chapter 2, essentially continues present law treatment of tax-exempt investors under an integrated tax system, so fully-taxed corporate profits would continue to bear one level of tax and preference income would not be taxed at either the corporate or shareholder level.⁷ A similar result can be accomplished under an imputation credit system of integration, but a dividend deduction system would eliminate the current corporate level tax on distributed earnings on equity capital supplied by tax-exempt investors.⁸ Under the shareholder allocation prototype described in Chapter 3, taxes are collected at the corporate level on corporate income allocable to investment by tax-exempt shareholders and no refund is provided to nontaxable shareholders.

Maintaining one level of tax on equity investments by tax-exempt entities would promote one of the primary goals of integration: achieving tax neutrality for all investors between corporate and noncorporate investments. This choice is consistent with a move to integration for taxable shareholders, because choosing to reduce the double tax burden on corporate income distributed to taxable investors does not necessarily dictate a commensurate reduction in the tax burden on tax-exempt investors. Finally, continuing to tax equity investments by the tax-exempt sector avoids the revenue loss that would result if such investments were completely tax-exempt. Increasing other tax rates to compensate for such a revenue loss would entail other inefficiencies.

Some countries that have adopted integration have chosen to tax separately corporate and other income allocable to tax-exempt investors. For example, in moving to an integrated corporate tax, Australia and New Zealand imposed a tax on the income of pension funds, thus reducing the number of tax-exempt investors. In both countries, the remaining tax-exempt investor base, such as charities, is small. Australia imposed a 15 percent tax on investment income earned by pension funds and made available the full 39 percent imputation credit from dividends as a nonrefundable offset. Australia did not project collecting more than a token amount of tax from this tax on investment income: it devised the mechanism to remove distortions between investing in domestic corporations (which pay Australian tax) and investing in foreign corporations (which generally do not). The new Australian system also removes distortions between investing in equity and investing in debt. New Zealand went further and repealed entirely the tax exemption of pension funds; they now function basically as taxable savings accounts. Under the U.K. distribution-related integration system, the corporate level tax is not completely eliminated, with the consequence that income distributed to tax-exempt shareholders bears some tax burden.⁹

This Report also encourages an effort to achieve uniform tax treatment of corporate debt and equity investments by tax-exempt investors.

Because of the important role played by the tax-exempt sector in the capital markets, failing to create neutrality for debt and equity investments by the tax-exempt sector would limit the extent to which integration could achieve tax neutrality between the two kinds of investments. This is achieved under CBIT by treating tax-exempt shareholders and debtholders generally like other suppliers of corporate capital, with tax imposed at the corporate level.¹⁰

One potential alternative approach would tax all corporate and noncorporate income allocable to investment by the tax-exempt sector at a rate lower than the rate applicable to taxable investors.¹¹ Such a tax on the investment income, including dividends and interest income, received by tax-exempt entities could be set to achieve overall revenues equivalent to those currently borne by corporate capital supplied by the tax-exempt sector. Under the imputation credit

prototype discussed in Chapter 11, for example, imputation credits for corporate taxes paid would be allowed to tax-exempt shareholders. To the extent that the credit rate exceeds the tax rate on investment income, the excess credits could be used to offset tax on interest or other investment income. In addition to the substantial advantage of equating the tax treatment of debt and equity held by such investors, such an approach would allow tax-exempt investors to use shareholder level credits for corporate taxes paid to the same extent as taxable shareholders.¹² By doing so, this approach would limit both portfolio shifts and other tax planning techniques that might otherwise be induced by efforts to distinguish among taxable and tax-exempt investors in integrating the corporate income tax. A revenue neutral rate for such a system would be in the range of 6 to 8 percent depending on the prototype.¹³ This would approximate the current law corporate tax burden on investments by tax-exempt shareholders.

CHAPTER 7:

TREATMENT OF FOREIGN INCOME AND SHAREHOLDERS

7.A INTRODUCTION

International issues are important in designing an integrated tax system because there is substantial investment by U.S. persons in foreign countries (outbound investment) and investment by foreign persons in the United States (inbound investment). At the end of 1990, private U.S. investors owned direct investments abroad with a market value of \$714 billion, and \$910 billion in foreign portfolio investment, while private foreign investors owned \$530 billion in direct investment in the United States and \$1.34 trillion in U.S. portfolio investment. U.S. investors received a total of \$54.4 billion of income from their direct investments abroad in 1990, and \$65.7 billion of income from their foreign portfolio investments, while foreign investors received \$1.8 billion from their direct investments in the United States in 1990 and \$78.5 billion from their U.S. portfolio investments.

The income from transnational investments may be taxed by both the country in which the investment is made (the host or source country) and the country of residence of the investor (the residence country). The United States uses two primary instruments for mitigating the potential problem of double taxation: the foreign tax credit and bilateral income tax treaties entered into between the United States and about 40 other countries.

Taxation of foreign investment by U.S. investors. The United States taxes the worldwide income of its residents.¹ The U.S. tax on income earned by U.S. corporations or individuals through foreign corporations is generally deferred until such income is repatriated through dividend or interest payments to U.S. shareholders or creditors.²

The United States allows taxpayers to claim a foreign tax credit for qualifying foreign income taxes paid (the direct foreign tax credit). Current

law also allows corporate taxpayers that receive dividends (or include Subpart F income) from at least 10-percent owned foreign subsidiaries to claim a foreign tax credit for a ratable portion of the qualifying foreign taxes paid by the subsidiary on the income from which the dividends are paid (the indirect foreign tax credit). The portion of the foreign taxes which taxpayers may claim as an indirect credit is proportional to the fraction of the earnings of the foreign subsidiary distributed or deemed distributed. The dividend income for U.S. tax purposes is grossed up by the amount of the direct and indirect credits claimed.³ The indirect foreign tax credit, like the dividends received deduction available domestically, prevents multiple taxation of corporate profits at the corporate level.

The Code limits the maximum foreign tax credit to prevent the foreign tax credit from offsetting taxes on domestic source income. Separate limitations apply to several different kinds of foreign source income (baskets) in order to restrict the use of foreign tax credits from high-taxed foreign source income against low-taxed foreign source income. For each basket, the Code limits the amount of foreign taxes paid on income in that basket which a taxpayer may claim as a credit in the current year to a fraction of the taxpayer's pre-credit tax on worldwide income in the same basket. The fraction is the ratio of the taxpayer's foreign source taxable income in the basket to the taxpayer's total worldwide taxable income in the same basket. Credits that a taxpayer cannot use in a given year because of the limitations may be carried back two years or forward five years. Additional limitations apply to taxpayers subject to the alternative minimum tax.

Taxation of foreign investors. The taxation of U.S. investment income of foreign individuals or corporations generally depends upon whether they are engaged in a trade or business in the United States. Foreign corporations and individuals engaged in a U.S. trade or business generally are

taxed on their net business income under the same rules that apply to a U.S. corporation or citizen engaged in the same business.

The treatment of domestic and foreign investors differs, however, at the shareholder and creditor level. Foreign investors not engaged in a U.S. trade or business are not subject to the individual or corporate income tax.⁴ Instead, subject to significant exceptions noted below, they are subject to a 30 percent withholding tax on their gross dividend, interest and other income. Capital gains realized by a foreign investor on the sale of stock or securities (except stock in certain U.S. corporations owning U.S. real property) generally are exempt from tax.

The Code exempts from the 30 percent withholding tax qualified portfolio interest and interest earned by foreign investors on U.S. bank deposits. Interest does not qualify as portfolio interest if the investor has a 10 percent or greater equity interest in the borrower or is a controlled foreign corporation related to the borrower or if the interest is paid on a bank loan made in the ordinary course of a banking business.

Under bilateral tax treaties, interest (if not already exempt) and dividends and other income paid to residents of a treaty country may qualify for a significantly reduced rate of withholding tax. The reduced rate of withholding tax applicable to dividends is often 15 percent and may be as low as 5 percent on dividends distributed by a U.S. subsidiary to a foreign direct corporate investor. Tax treaties may reduce the rate of withholding on otherwise taxable interest income paid to foreign investors (in particular, related foreign investors) to 5 or 10 percent or, in many cases, zero.

The current U.S. tax treatment of cross-border investment generally reinforces the biases created by other features of the classical system of corporate taxation: against equity compared to debt and for retention rather than distribution of corporate earnings. Statutory exemptions for cross-border interest payments, together with more favorable treaty provisions for interest than for dividends,

reinforce the bias against equity. Likewise, the potential for deferral of U.S. tax liability on non-Subpart F income reinforces the bias towards retention of such income by foreign subsidiaries.

The major international issues that must be addressed in any integrated system are:

- Should foreign taxes paid by U.S. corporations be treated identically to taxes paid to the U.S. Government? If so, the foreign tax credit for corporate taxes paid, in effect, would be extended to shareholders. As a consequence, income that is taxed abroad at a rate equal to or greater than the U.S. tax rate would not be subject to U.S. tax either at the corporate level or at the shareholder level.
- Should the benefits of integration be extended to foreign shareholders? If so, income allocable to (or paid to) foreign shareholders would be subject to only one level of U.S. tax, at either the corporate or shareholder level. If the tax is imposed only at the shareholder level, U.S. income tax treaties may substantially reduce the tax.

This Report recommends that: (1) foreign income taxes paid with respect to outbound investment not be treated the same as U.S. taxes paid for integration purposes, (2) foreign shareholders not receive by statute benefits of integration received by U.S. shareholders, and (3) the United States' income tax treaties with other countries be used as the appropriate vehicle for relaxing either of the preceding rules where reciprocal benefits are given by the foreign country to U.S. taxes or investors in their integration systems.

7.B OVERVIEW OF U.S. INTERNATIONAL TAX POLICY

As indicated above, cross-border investments are potentially taxable in at least two countries: the residence country (the country where the investor resides) and the source country (the country where the investment is made). Sovereignty unavoidably complicates international tax policy: a country may set its own tax policies, but not the policies of other countries, even though the policies of other countries have a direct

impact on the first country's welfare. As a result, a residence country generally must respect a source country's claim to tax income that is derived within the source country's borders. However, the source country has little control over the ultimate level of aggregate taxes paid by foreign investors on profits earned in the source country. By choosing to impose additional tax on an investor's income from the source country, by exempting such income from its own tax, or by choosing some intermediate policy, the residence country, not the source country, makes the final decision about the tax burden borne by the residence country's investors.

Normative Guidance for International Tax Policy

No consensus exists about the proper norms for capital taxation in economies with international capital and labor mobility. Integrating models of capital taxation and international trade, policy-makers have suggested two principles for taxation of international investments:

- **Principle 1 (Capital Export Neutrality).** Investors should pay equivalent taxes on capital income, regardless of the country in which that income is earned.
- **Principle 2 (Capital Import Neutrality).** All investments within a country should face the same tax burden, regardless of whether they are owned by a domestic or foreign investor.

Maintaining both principles simultaneously is not a practical option, however, because it would require that capital income be taxed equally in all countries. That will never occur as long as sovereign countries establish different tax rates.

National tax systems, such as that of the United States, can approach capital export neutrality while taxing worldwide income of resident multinational enterprises (the worldwide method of taxation), if either the residence country provides credits to its enterprises for taxes remitted to foreign governments or the source country surrenders the right to tax income from foreign investments within its borders. Capital import neutrality can be achieved if the residence country

decides not to tax income earned from foreign jurisdictions and allows the source country to be the sole taxing authority for international investment income.

Since capital export and capital import neutrality cannot be attained simultaneously when international differences exist in capital income taxation, a clear advantage for one or the other would be useful. However, analyses of international taxation by economists specializing in international trade generally offer no strong endorsement of one principle relative to the other.⁵ Capital taxation in open economies (economies in which international borrowing and lending occur) can distort both the level of saving within an economy and its allocation among alternative investments at home and abroad. Capital import neutrality can enhance worldwide economic efficiency if domestic savings are inefficiently low by reducing the tax burden on savings.

Capital export neutrality, in contrast, enhances worldwide efficiency in the allocation of savings. It may be a guiding principle when efficiency costs of distortions in the allocation of savings are significant relative to costs of tax-induced distortion in the level of savings. Most available evidence supports the proposition that the sensitivity of domestic savings with respect to changes in net return is small relative to the sensitivity of the location of investment with respect to changes in net return.⁶ Accordingly, many economists and policymakers presume that capital export neutrality offers better guidance for international tax policy. Nonetheless, given the existence of tax-induced distortions in both savings and investment, the complexity of the modern multinational enterprise (relative to two-country examples often considered in theory), and the possibility of international tax competition, some compromise between capital export and capital import neutrality is inevitable.⁷

Outbound Investment

Since 1918, through the foreign tax credit, the United States has generally implemented the

principle of capital export neutrality unilaterally and without interruption.⁸ Since 1921 the foreign tax credit has been limited so it does not exceed the U.S. tax liability incurred on the foreign source income in the absence of the credit. The limitation seeks to prevent the credit from offsetting U.S. tax on U.S. source income. However, because the limitation allows a foreign tax rate that is higher than the U.S. tax on the relevant income to go unrelieved, the limitation works against the policy of capital export neutrality.

A taxpayer generally receives a foreign tax credit only for income taxes paid to a foreign government on the taxpayer's own income. Thus, a shareholder generally may claim a credit for foreign taxes withheld from a dividend payment includable in the shareholder's income but may not claim a credit for the foreign taxes paid by the corporation on the income out of which the dividend is paid. The only exception to this principle is the indirect foreign tax credit allowed for a domestic 10 percent corporate shareholder of a foreign corporation for the foreign income taxes paid by the foreign subsidiary on the income out of which the dividend is paid.⁹

In other respects, however, the U.S. taxation of outbound investment tends toward capital import neutrality—the tax rate on foreign source income of a U.S. investor is determined by the tax imposed by the source country. First, the U.S. tax regime generally allows deferral. That is, the U.S. tax on foreign source income of U.S. owned foreign companies is deferred until such profits are repatriated in the form of dividends. Deferral affects a U.S. investor's initial decision to make or forgo a foreign investment because, even if the investor is obligated to pay the residual U.S. tax (a capital export neutral result), the time for paying this tax may be postponed indefinitely. Deferral thus substantially reduces, and under some conditions virtually eliminates, the present cost of the residual U.S. tax (a capital import neutral result).¹⁰ Deferral, however, is not significant with respect to dividends paid from current earnings, or where foreign tax rates equal or exceed the U.S. corporate rate. In addition, certain foreign corporations controlled by U.S.

residents are subject to current U.S. tax on certain types of undistributed income under the Code's Subpart F rules. The advantage of deferral also is less where the domestic corporate ownership interest is less than 10 percent of the voting stock in the foreign corporation. In that case, the indirect foreign tax credit is not available. Thus, dividends will incur both the foreign corporate level tax and, after deduction of the foreign tax, the U.S. corporate level tax.

Second, the U.S. tax regime allows averaging. That is, in determining the residual U.S. tax on foreign profits, a high foreign tax imposed on one item of foreign income may be averaged against a low foreign tax imposed on another item of foreign income, as long as the different items of income are both within the same statutory basket for purposes of the foreign tax credit limitation rules. If the foreign tax rate on an item of foreign income is higher than the U.S. rate, the U.S. investor may or may not bear the cost of the higher foreign rate, depending on the opportunities for averaging. If the investor must bear the higher rate, it is placed in parity with local investors in the foreign country, a capital import neutral result. If, on the other hand, the investor is able to average the high foreign tax rate on the income in question against low foreign rates on other foreign income, then the investor will avoid the extra burden of the high foreign rate. This should render the investor capital export neutral with respect to the highly taxed foreign income (since averaging will reduce the total tax on such income to the U.S. rate, but no lower), but also should render the investor capital import neutral with respect to the lower taxed foreign income (because the investor is able to escape some of the residual U.S. tax on such income). The opportunities for averaging have been reduced since the 1986 Act created separate foreign tax credit limitation baskets for specific types of income.

Inbound Investment

U.S. tax policy on inbound investment generally asserts a substantial source country claim to tax on certain types of income coupled with a policy of nondiscrimination against foreign

investors. For foreign owned corporate investment, the United States generally imposes two levels of tax. Thus, the United States taxes the business profits of foreign owned domestic corporations or U.S. branches of foreign corporations similarly to the profits of U.S. owned domestic companies and imposes significant withholding taxes on dividends paid to foreign investors. The U.S. rules for taxing the U.S. branch of a foreign corporation also are designed to impose on the branch's profits the same amount of tax that would be imposed if the branch were a subsidiary of a U.S. corporation. The major exceptions to the general U.S. policy are the exemption of much of the interest income that is paid from U.S. sources to unrelated foreign lenders (other than banks), the decision to exempt capital gains not effectively connected with a U.S. business or attributable to a U.S. real property interest, and the reduction of withholding taxes on dividends, non-exempt interest, and royalties paid to foreigners (whether or not related) through bilateral treaties.¹¹

The United States's network of bilateral income tax treaties significantly modifies the statutory orientation toward source country taxation. In general, tax treaties boost the tax claims of the residence country, largely by substantially reducing the withholding rates at source on investment income. In addition, tax treaties may require higher levels of business activity (a permanent establishment) before asserting a U.S. claim to tax business profits.¹²

7.C INTERNATIONAL TAX POLICY AND INTEGRATION

Outbound Investment— Treatment of Foreign Taxes

This Report generally recommends that, in an integrated tax system, the statutory treatment of foreign taxes paid by corporations should differ from the treatment of the taxes they pay to the U.S. Government. Equal statutory treatment of foreign and U.S. corporate level taxes would significantly reduce the current U.S. tax claim against foreign source corporate profits and often

would completely exempt such profits from U.S. taxation at both the corporate and shareholder levels. Such unilateral action would result in a significant departure from the prevailing allocation of tax revenues between source and residence countries.¹³

The integration systems recommended in this Report, therefore, generally retain the corporate level foreign tax credit but do not extend to shareholders the benefits of a foreign tax credit for foreign taxes paid by the corporation. However, where foreign income is taxed at a foreign rate that is lower than the current U.S. corporate rate, there would be less double taxation than under current law, because corporate level residual tax would be treated identically to any other U.S. corporate taxes.¹⁴ Foreign source income subject to tax in the source country at source country rates higher than the U.S. rate would continue to be subject to a single level of U.S. tax when distributed. Thus, although foreign source income earned by U.S. corporations might be subject to more tax than domestic income, foreign source income generally would not be subject to double taxation to any greater extent than under current law. Retaining a single level of tax on foreign income should not harm the ability of U.S. firms to compete in foreign markets relative to current law.

Critics of continuing to impose any U.S. tax on foreign profits might contend that, because the United States currently is willing to give up entirely its tax on certain types of foreign profits, it should be willing to do so generally for foreign corporate profits in an integrated corporate tax system. This argument is not compelling, however. To be sure, the United States does not always currently insist on a single level of tax on foreign source income, as evinced by its unilateral decision to grant a foreign tax credit to individuals earning foreign income directly or through a partnership. Individual profits from foreign sources, however, have been a small fraction of the foreign source profits earned by U.S.-based multinational corporations, and the revenue loss from such a policy has therefore been small compared to that which would occur if foreign

taxes paid by corporations eliminated U.S. tax at both the corporate and shareholder levels. Moreover, allowing a foreign tax credit to individuals on the foreign source income directly earned alleviates the burdensome tax structure that would otherwise arise under current law, because deferral would not be available and the foreign and U.S. taxes would both be imposed currently.

Another potential criticism is that failure to pass through foreign tax credits to shareholders would violate capital export neutrality and, hence, would be inconsistent with our underlying goal for integration: to enhance economic efficiency. As discussed above, however, it is not apparent that export neutrality does, in fact, lead to an efficient allocation of capital. In any case, if foreign tax credits were available to offset the single level of tax in an integrated system, the revenue loss would be serious—approximately \$17 billion a year. Taxes would have to be raised elsewhere, and that would generate its own inefficiencies.

Finally, passing through foreign tax credits to shareholders would pose significant administrative difficulties. The foreign tax credit limitation and sourcing rules would have to be applied at the individual shareholder level both to ensure that taxpayers claimed the proper credit for foreign taxes and to prevent the U.S. Treasury from bearing the cost of high foreign tax rates. Without these rules, shareholders in corporations with foreign income that is taxed at a rate greater than the U.S. rate could use the excess credits to offset tax liability on domestic income, with the consequence that the U.S. Treasury would in effect provide domestic shareholders with refunds of corporate taxes paid to foreign countries.¹⁵ This is a particularly serious issue because tax rates in many foreign jurisdictions are higher than current U.S. tax rates. The difficulty of ensuring the availability of adequate information concerning foreign taxes to both the shareholder and the IRS would complicate application of these rules at the shareholder level for widely held, non-U.S. controlled foreign corporations.

From a legal point of view, continuing to impose a single shareholder level of residence

country taxation on foreign source income would not violate the United States' treaty commitments to eliminate double taxation by granting a foreign tax credit. Because U.S. tax treaties generally reflect an assumption that treaty partners have classical systems of corporate-shareholder taxation, the United States' treaty obligations require that U.S. corporations be allowed a foreign tax credit against the U.S. tax on foreign source income received directly by the corporation, and that individuals be allowed a credit for foreign source income received by the individual. No treaty obligation requires the United States to grant further relief with respect to foreign taxes paid or deemed paid by a domestic corporation, e.g., by eliminating the shareholder tax on a taxable dividend under the dividend exclusion prototype (or CBIT) or, if a compensatory tax is imposed under CBIT, refunding the compensatory tax. In specific circumstances, however, the United States might agree to extend, by treaty, the benefits of integration to foreign taxes on profits of U.S. multinationals.

Under the dividend exclusion prototype, a problem with maintaining a single level of U.S. tax on foreign earnings is a continued bias in favor of the noncorporate, rather than the corporate, form for foreign investment, although, as a practical matter, this problem may not be very serious. Individuals would be entitled to a foreign tax credit for foreign taxes imposed on their direct investments but not for taxes imposed on the investments of corporations of which they are shareholders. Thus, by not treating foreign corporate taxes equivalently to U.S. corporate taxes, an incentive to structure foreign investment through partnerships would continue. If the corporate form could not be avoided, there also would continue to be an incentive to make foreign investments in the form of debt, which would reduce the foreign tax base and convert foreign profits to domestic profits. Large investors might achieve similar effects by using rental or royalty payments or by aggressive transfer pricing.

The dividend exclusion and imputation credit prototypes implement our policy recommendations by maintaining the current foreign tax credit rules

and by limiting the amounts of excludable dividends to corporate income on which U.S. taxes have been paid (or limiting shareholder imputation credits to U.S. taxes paid).¹⁶ In effect, dividends paid out of foreign source income not previously subject to U.S. tax because of foreign tax credits would be taxed fully at the shareholder level, as under current law. Under CBIT, the U.S. tax may alternatively be imposed through a compensatory tax at the corporate level on distributions of foreign source income shielded from regular CBIT by the foreign tax credit.¹⁷ In either case, corporations are allowed to treat dividends as paid first out of U.S. taxed income. Under the shareholder allocation prototype, foreign taxes, in essence, would be treated as equivalent to U.S. taxes, and this is among the reasons that this prototype is not recommended in this Report.¹⁸

Inbound Investment— Treatment of Foreign Investors

The basic issue that an integration proposal must resolve for inbound investment is whether, by statute, the United States should continue to collect two levels of tax on foreign owned corporate profits or whether foreign investors should receive benefits of integration similar to domestic investors.¹⁹ For the reasons set forth below, this Report recommends that, except in the case of CBIT, foreign shareholders not be granted integration benefits by statute, but instead that this issue be addressed on a bilateral basis through treaty negotiations. Most of the major trading partners of the United States that have integrated their corporate tax regimes have followed this approach.²⁰

At least two basic obstacles restrain unilateral extension of integration benefits to foreign shareholders. The first is the inherent limitation on any source country's taxation of foreign investors. The residence country, not the source country, ultimately decides the tax burden that should be borne by its resident investors. As a consequence, if the United States unilaterally extended the benefits of integration to foreign shareholders, it would abandon its right to source country taxation of dividends with no assurance that the foreign

investors would not be subject to a second level of tax in their country of residence. Substantial revenue would be lost without any necessary increase in efficiency of capital allocation.

The second obstacle is the interaction between a U.S. integration system and existing treaty obligations. For example, extending a refundable imputation credit to foreign shareholders by statute, combined with traditionally low treaty withholding rates on dividends, could significantly reduce the aggregate U.S. tax on profits distributed to foreign shareholders, without any comparable reduction in foreign taxes on U.S. investments in the treaty country.²¹

Thus, there is no reason for the United States by statute unilaterally to extend the benefits of integration to foreign shareholders. Integration seeks to provide relief for investors using the corporate form, not for foreign governments. If a second level of tax is to be collected, no obvious conceptual or practical reason exists why the source country should sacrifice its claim to this tax revenue for the sake of consistency.

Several of our treaty partners adopting imputation credit systems have concluded that refusing to extend integration benefits by statute to foreign shareholders residing in treaty countries would not violate the provisions of tax treaties that prohibit discrimination based on capital ownership. These countries argue that, under an imputation credit system, all profits are taxed at the corporate level at the same rate (34 percent, for example), without regard to "capital ownership," and allowing or denying the imputation credit to the shareholders is an issue of how to tax the shareholder, not the corporation. No treaty requires that foreign shareholders receive the same tax credits as domestic shareholders. Thus, there is no treaty violation. Similar arguments could be made about the dividend exclusion prototype.²²

As Chapter 2 indicates, the dividend exclusion prototype generally would not provide any integration benefits to foreign shareholders, because current withholding taxes would continue to apply.²³ Similarly, inbound investment in an

imputation credit system would remain subject to two levels of U.S. tax because imputation credits would not be made available to foreigners and current withholding taxes would continue to apply. Neither approach would treat inbound investment more harshly than under current law, because deferral of the second level of tax would continue.²⁴ A dividend deduction system, on the other hand, would automatically extend the benefits of integration to foreign shareholders, unless a rule were adopted to deny the deduction for dividends paid to foreigners — a rule that would violate U.S. treaty obligations. The shareholder allocation prototype avoids extending the benefits of integration to foreign shareholders by imposing corporate level tax, continuing to impose withholding tax on dividends, and denying refunds of corporate taxes paid to foreign shareholders.²⁵

In contrast, to ensure parity between debt and equity, the CBIT prototype generally removes the withholding tax on both dividends and interest of CBIT entities and repeals the branch profits tax. The result is that both debt and equity income would be subject to tax once.

The United States may consider extending the benefits of integration to foreign shareholders resident in countries that have treaties with the United States. The fundamental policy issue in deciding whether and how to extend integration by treaty to foreign shareholders is how to divide the tax revenue from corporate profits between the source country and the residence country. As noted above, traditional treaty rules reflect an allocation of revenue based on the classical,

two-tier tax system for corporations and shareholders: the source country generally has the exclusive right to tax business profits earned therein by a domestic corporation and the two countries divide the right to tax the profits when distributed, with the greater share of this revenue going to the residence country. Integration, of course, alters the original pool of tax revenue by decreasing the total (assuming no offsetting rate increases) and by reallocating it between the shareholder and corporation. Thus, moving to an integrated corporate tax system may upset the balance of interests traditionally reflected in the treaty rules of the United States.

Various methods can be devised for extending integration by treaty to inbound and outbound investment, and these different methods will produce differing allocations of the taxes collected from the corporation between the source country and the residence country. For example, the dividend exclusion prototype could be adopted to permit the source country to retain its corporate tax revenues: the source country would eliminate its withholding tax on distributions to treaty residents and the residence country would credit the source country taxes against the direct and ultimate shareholders' tax liabilities in the residence country and collect any residual tax. An alternative approach would impose a tax on foreign shareholders at a rate that would approximate the current level of revenues now collected by the United States on U.S. source corporate income from foreign investments and allow a credit against this tax for corporate level taxes paid.²⁶

CHAPTER 8: THE TREATMENT OF CAPITAL GAINS IN AN INTEGRATED TAX SYSTEM

Moving from a classical to an integrated corporate tax system raises issues relating to the taxation of capital gains on sales of corporate stock. While each of the integration prototypes reduces the biases of the classical system, rules selected for taxation of capital gains on sales of corporate stock will affect the degree of neutrality achieved by each prototype. Taxing shareholder level capital gains on stock attributable to earnings that have been taxed at the corporate level is not appropriate in an integrated system. Taxing such gains on stock could perpetuate the classical system's biases against the corporate form and against investments in equity rather than debt. In addition, a higher effective tax rate on retained earnings could provide a tax incentive for corporations to distribute earnings as dividends. On the other hand, a failure to tax shareholder level stock gains may result in significant deferral or even elimination of tax attributable to unrealized corporate asset appreciation.¹

8.A TAXATION OF CAPITAL GAINS ATTRIBUTABLE TO RETAINED TAXABLE EARNINGS

When a corporation retains earnings, its stock will generally increase in value. There is some controversy about the extent to which an incremental dollar of retained earnings translates into share appreciation.² In integration prototypes that tax earnings at the corporate level, e.g., the dividend exclusion and CBIT prototypes, dividends would not generally be taxed again at the investor level. Under these prototypes, to preserve neutrality in the taxation of corporate capital income, shareholders' capital gains attributable to retained earnings that have already been taxed fully at the corporate level should not be taxed

again at the shareholder level. Imposition of a capital gains tax in this case would be a double tax on the retained earnings of the corporation.

The second level of tax, however, may prove temporary. If the corporation subsequently distributes the retained earnings, the value of the stock may decline to reflect the distribution of corporate assets. As a consequence, the tax on the selling shareholder's gain may be effectively reversed by an offsetting capital loss of the purchasing shareholder. The extent to which the capital loss reverses the double tax will depend on the timing of the distribution of the retained earnings and of the realization and treatment of the capital loss.³

When the tax reduction from the later capital loss precisely offsets the tax on the earlier capital gain, the system will collect only one tax on corporate earnings. However, a subsequent capital loss deduction allowed to a taxpayer different from the one who originally is taxed on the capital gain will often be an imperfect offset. For example, the tax on the gain may occur in a year earlier than the tax reduction from the capital loss. The acceleration of tax may even approximate, in present value terms, double taxation if there is a substantial period between the payment of capital gains tax by the first shareholder and the recognition of an offsetting capital loss by a subsequent shareholder. In addition, limits on the deductibility of capital losses may prevent the purchasing shareholder from fully using the offsetting capital loss. The additional burden imposed by a capital gains tax also depends on the marginal tax rates of the purchaser and seller of stock,⁴ and the fact that shareholders with different marginal tax rates will generally face identical market prices for their stock further complicates analysis of the extent of double taxation.

8.B SOURCES OF CAPITAL GAINS OTHER THAN TAXABLE RETAINED EARNINGS

Not all capital gains from increases in the value of corporate equity arise from accumulated retained earnings. Gains from other sources may imply different tax consequences than those applicable solely to gains from fully-taxed retained earnings.

First, capital gains on corporate stock may be attributable to retained preference income. In that case, taxing capital gains on corporate stock does not impose a second level of tax, because no tax has been paid at the corporate level. Taxing such capital gains produces a single tax on those earnings at the shareholder level. If, as we recommend in Chapter 5, integration should not extend corporate level preferences to shareholders, such gains should be taxed. Providing relief for capital gains attributable to retained preference income would exacerbate the incentive to retain rather than distribute preference income or to distribute preference income in a nondividend distribution in which capital gain treatment might be available.⁵

Second, capital gains may be attributable to real unrealized appreciation in the value of corporate assets. In that case, the unrealized corporate level gain, in effect, will be realized first at the shareholder level upon the disposition of the stock. The gain also will be realized at the corporate level when the corporation disposes of the asset. Although such gains eventually will be taxed at the corporate level, in a realization-based income tax system, taxing the shareholder level gain seems appropriate, since that is the first realization event with respect to the appreciation. It may, however, be appropriate to prevent double taxation when the corporation subsequently disposes of the appreciated asset.⁶

Third, capital gains may be attributable to changes in the anticipated value of corporate earnings, due, for example, to management changes or revised estimates of profits from new products or inventions. Tax considerations for

gains attributable to such factors are similar to those concerning unrealized appreciation in tangible corporate assets. Accordingly, taxing the appreciation when the shareholder sells the stock seems appropriate.

Finally, taxable capital gains may result from inflation. In an unindexed system, capital gains tax liability can result simply because nominal asset values rise with inflation, although a taxpayer may have no increase in real income. Taxing such gains can lead to high effective tax rates on capital gains. Indeed, granting relief to capital gains to offset the effects of inflation has been one of the principal justifications advanced for measures such as lower rates on capital gains or indexation of such gains.⁷

8.C ADJUSTMENTS TO ELIMINATE DOUBLE TAXATION OF RETAINED CORPORATE EARNINGS

Although avoiding the double taxation of corporate retained earnings is an important factor to be taken into account, how capital gains are treated in an integrated corporate tax system will turn ultimately on the resolution of basic policy issues that have long been controversial under the income tax. Considerations such as the desire to stimulate investment and entrepreneurship and to avoid the overtaxation of inflationary gains support preferential rates or exclusions for all or a part of capital gains income. On the other hand, some analysts will contend that capital gains and ordinary income should be taxed similarly.

Integration of the corporate income tax can proceed and will serve to reduce substantially the distortions of the current system whichever of these options for taxing capital gains is chosen. However, in designing an integrated corporate tax, one must consider the treatment of capital gains, as well as dividends, in developing rules that minimize distortions in corporate and individual financial behavior.

As discussed in Chapter 3, the shareholder allocation prototype would allocate corporate

taxable income to shareholders each year and would provide a system of shareholder level basis adjustments similar to those used for partnerships or S corporations under current law.⁸ Share basis would increase to reflect the corporation's taxable income and certain preference income and would decrease to reflect distributions. Thus, under such a system, any capital gains on sale of corporate stock would be attributable to preference items for which no basis adjustment is allowed, unrealized appreciation, or inflation.

On the contrary, the dividend exclusion prototype, set forth in Chapter 2, does not provide any adjustments to share basis to reflect the corporation's retention of income that has been taxed at the corporate level. As a consequence, taxing capital gains could impose an additional shareholder level tax on retained earnings that have already been taxed in full at the corporate level. Because retained fully-taxed earnings would face a greater tax burden than distributed earnings, corporations would have an incentive to distribute rather than retain fully-taxed earnings. This problem can be limited by allowing a dividend reinvestment plan (DRIP), which would permit a corporation to declare deemed dividends to the extent of its EDA balance and treat the amount of dividend as reinvested in the corporation. Under such a system, a shareholder would be treated as receiving an excludable dividend and would increase stock basis to reflect the deemed recontribution. Chapter 9 discusses DRIPs in detail.

If corporations were to use a DRIP to declare deemed dividends equal to their fully-taxed income each year, the resulting basis adjustments would ensure that such income would not be taxed again as capital gains. If, however, nontax considerations lead corporations not to elect DRIP treatment for all their fully-taxed earnings, an elective DRIP would not eliminate the potential additional tax on retained corporate earnings. For example, a corporation that expects to earn substantial preference or foreign source income shielded by foreign tax credits might want to retain some EDA balance to enable it to continue to pay excludable cash dividends in future years. If no

DRIP is allowed, or if it is expected that corporations will not elect to make deemed distributions of all fully-taxed income, one could reduce or eliminate the potential disadvantage for retained earnings by adopting a preferential rate (or, equivalently, a partial exclusion) for capital gains.

Taxing capital gains on equity and debt investments in business entities creates special issues under CBIT. If a compensatory tax is imposed under CBIT, all business income would be taxed at the entity level, and investors would exclude from income all dividends and interest payments received. In that case, taxing capital gains would create an even greater disparity between retained and distributed income than under the dividend exclusion prototype. Thus, if CBIT includes a compensatory tax, a complete investor level exemption for capital gains (and nonrecognition of losses) on equity and debt would be consistent with CBIT's general exemption from investor level tax of dividends and interest. If CBIT does not include a compensatory tax, but instead taxes dividends and interest considered to be paid out of corporate preference income at the investor level (see Section 4.D), the case for relief for capital gains is essentially the same as under the dividend exclusion prototype.

If CBIT includes a compensatory tax, exempting gains and losses from the sale of equity interests in CBIT entities could be justified on the ground that those gains and losses either have been, or will be, taken into account in calculating the income tax imposed at the entity level. Retained taxable income has already been subject to tax, retained preference income will be subject to compensatory tax under CBIT when distributed, and unrealized appreciation represents anticipated higher future earnings that will be subject to entity level tax if and when they are realized.⁹ Exempting capital gains on CBIT equity and debt would promote simplicity in the CBIT prototype. For example, exempting capital gains on CBIT debt and equity would remove the need for a DRIP mechanism to allow holders to increase basis to reflect earnings taxed at the corporate level.

The principal disadvantage of exempting gains on CBIT equity is the potential for deferral of tax on appreciation in an entity's assets. A realization-based tax system may allow a significant delay between the realization of gain by an equity investor (through the sale of his equity interest) and the realization of future earnings or built-in gain at the entity level. Foregoing the opportunity to tax gains realized upon a sale of an equity interest thus increases the potential for the deferral of tax on unrealized appreciation at the entity level.¹⁰ Although additional realization rules at the entity level could limit deferral,¹¹ sale of an equity interest traditionally has been viewed as an appropriate realization event and the more traditional solution to the problem of double taxation has been to adjust entity level asset basis to reflect investor level realization.¹²

CBIT also raises issues relating to capital gains on debt. Some, but not all, changes in the value of debt reflect gains and losses that have been or will be taxed at the corporate level.¹³ For example, one source of capital gains on debt is an increase in the creditworthiness of the issuer, which may reflect an increase in the corporation's expected future earnings. If an increase in creditworthiness is due to earnings that will be taxed at the corporate level, the issues created by taxing capital gains on debt are similar to those for equity.¹⁴ Capital gains and losses on debt (and corresponding losses and gains to issuers) also may arise from unexpected movements in market interest rates.¹⁵ The movement to a CBIT system does not demand an exclusion of gains on CBIT debt that are due to changes in interest rates, and it is impossible as a practical matter to distinguish between gains attributable to interest rate movements and gains attributable to other sources.¹⁶

8.D OTHER COUNTRIES

Many countries recognize the possible distortion caused by taxing capital gains on sales of corporate stock and have taken measures to mitigate this effect. Table 8.1 shows the tax treatment of capital gains of the G-7 countries with integrated tax systems. All the countries

provide some preferential treatment for capital gains on corporate stock through a lower effective tax rate. For example, Canada, France, and Germany all provide for an alternative or reduced tax rate applied to such gains. These reductions can be substantial. In Germany, for example, all gain on securities held more than 6 months may be excluded. The United Kingdom does not permit a reduction in its marginal tax rate, although the tax base is indexed for inflation, but instead allows a specific "dollar" exemption. Gains exceeding the exemption are taxed at the applicable marginal rate.

8.E SHARE REPURCHASES

The differences in taxation of gains from similar transactions complicates analysis of the proper treatment of capital gains on corporate stock under integration. The treatment of share repurchases is one example. A shareholder who sells stock to a person other than the corporation that issued the stock or who receives a liquidating distribution generally can recover the basis in the stock against the amount realized on the sale. In contrast, current law may treat a redemption of stock by the issuing corporation as a dividend or as a sale of stock. A redemption generally qualifies for sale treatment if it is "not essentially equivalent" to a dividend or is substantially disproportionate among shareholders.¹⁷ For redemptions treated as a dividend, no basis recovery is permitted (although, generally, the basis in the redeemed stock is allocated to the remaining stock and will be recovered eventually).

Current law favors share repurchases because dividends are taxable to shareholders in full, while redemptions generally permit recovery of basis by shareholders and may permit taxation of gain at the maximum rate of 28 percent for long-term capital gains (rather than at the higher marginal rates for ordinary income).¹⁸

In general, each of the integration prototypes should greatly reduce current law's incentive to engage in share repurchases. Shareholder allocation integration, which treats both distributions and sales of stock as tax free to the extent of

Table 8.1
Taxation of Individuals on
Long-Term Gains on Securities
Select Foreign Countries

Foreign Country	Amount of Gain Exempt	Maximum Individual Tax Rate (Capital Gains) ¹
France	All, if the sale proceeds do not exceed FF307,760 (\$55,323) ²	16%
United Kingdom	All inflationary gains plus an annual exemption of £5,000 (\$8,885) of non-inflationary gains	40%
Canada	25% exclusion, plus a lifetime exemption of C\$100,000 (\$88,480)	22%
Germany	All gain on securities held more than 6 months ²	0%

Department of the Treasury
Office of Tax Policy

¹National tax only. Subnational taxes are relevant in Canada only. Provincial taxes (non-deductible) amount to roughly 50 percent of the Federal tax.

²The exemption does not apply in certain cases where the seller held a "substantial interest" in the corporation whose shares are being sold.

share basis and capital gain thereafter, would treat share repurchases and dividends similarly.¹⁹ The dividend exclusion prototype, which treats dividends paid out of fully-taxed earnings as tax free to shareholders, generally would encourage corporations to distribute fully-taxed earnings to taxable shareholders as dividends rather than through share repurchases. Corporations that had exhausted their EDA balance and could pay only taxable dividends, however, would have an incentive to distribute earnings through share repurchases. Even corporations with sufficient EDA balances might desire to make selective share repurchases from tax-exempt shareholders to distribute earnings without reducing the corporation's EDA.²⁰ The incentives for share repurchases under CBIT are generally the same as those under the dividend exclusion prototype, except that the incentive to make share repurchases out of preference income may be more

pronounced if a compensatory tax is imposed on dividends but not on share repurchases. Avoiding the compensatory tax would allow preference income to be distributed to tax-exempt and foreign investors without tax at either the corporate or the shareholder level.

One way to eliminate the remaining incentive for share repurchases under the dividend exclusion and CBIT prototypes would be to treat redemptions like dividends. In that case, share repurchases, like dividends, by a corporation with sufficient earnings and profits would not permit basis recovery. Share repurchases would be tax-free to shareholders to the extent of the corporation's fully-taxed income

(and would reduce the corporation's EDA). Any portion of payments to repurchase shares that were made out of preference income would be taxable to shareholders, in a dividend exclusion system, or subject to compensatory tax or an investor level tax, in CBIT.²¹ This result may be inappropriate, however, in a system in which capital gains are subject to tax, because a shareholder's basis would be taken into account on a sale to a third party, but not in a corporate repurchase. In theory, dividend treatment could be extended to all sales of shares, including sales to persons other than the issuing corporation. However, it may be impractical to extend dividend treatment to third-party sales, given the large volume of daily trading in corporate stock.²² Limiting dividend treatment to redemptions would, however, create disparities between sales of stock to the issuing corporation and to third parties.

The treatment of capital gains also may affect the desirability of measures to equalize the treatment of dividends and share repurchases under the dividend exclusion and CBIT prototypes. A preferential rate for capital gains, for example, might reduce, but not eliminate, the disincentive for share repurchases out of fully-taxed income while increasing the incentive for share repurchases out of preference income. On balance, we believe that any of the integration prototypes will sufficiently decrease incentives for share repurchases as compared to current law that policymakers may avoid adopting any additional rules and let the passage of time demonstrate whether the shifting of EDA balances among shareholders requires additional measures.²³

8.F CAPITAL LOSSES

In general, the treatment of capital losses on corporate stock under integration should parallel the treatment of capital gains. As Section 8.A discusses, a purchaser's capital loss may serve to reverse the tax imposed on a seller's capital gain attributable to retained earnings that have

previously been taxed at the corporate level. However, if relief is provided for capital gains on corporate stock, the corresponding loss need not be allowed in full as an offset. For example, an exemption (or partial exclusion) for capital gains on corporate stock might imply a disallowance (or partial disallowance) of capital losses on corporate stock. Policymakers may, however, decide to tax capital gains on corporate stock, on the grounds that the second level of tax on retained earnings may prove temporary and that preferential treatment could exempt from tax other gains (like some of those discussed in Section 8.B) that may appropriately be taxed under integration.

Other capital losses on corporate stock may arise from unrealized depreciation in corporate assets, just as capital gains may arise from unrealized appreciation.²⁴ As Section 8.B notes, in a realization-based tax system, it seems appropriate to allow such losses, although it may be appropriate to make adjustments to prevent a second loss at the corporate level, e.g., by adjusting corporate asset basis. As under current law, the desirability of such measures must be weighted against their complexity.²⁵

CHAPTER 9: DIVIDEND REINVESTMENT PLANS

Under the dividend exclusion and CBIT prototypes, corporations (and other entities subject to CBIT) may desire to retain earnings but allow their shareholders to increase share basis to reflect earnings which have been taxed at the corporate level. Allowing basis adjustments would reduce the extent to which taxes on investor capital gains would be a second tax on retained earnings and would reduce the tax incentive for corporations (and other CBIT entities) to distribute fully-taxed income. See Chapter 8. We contemplate that this would be permitted through an elective dividend reinvestment plan (DRIP).¹ DRIPs may be adopted by corporations under current law; such plans commonly are used by mutual funds and utilities. Because dividends are taxable to shareholders under current law, participation in DRIPs generally requires an election by the shareholder. Unlike existing DRIP arrangements, however, deemed dividends reinvested under an integration prototype would not be taxable to shareholders and the DRIP could be adopted by the corporation (or CBIT entity) without the consent of the individual shareholder.² Adopting a DRIP would simply represent a corporate decision to reduce the corporate EDA in order to increase share basis.

9.A MECHANICS

By adopting a DRIP, a corporation would elect to treat shareholders as receiving excludable dividends in an aggregate amount not to exceed the balance in the corporation's EDA. The amount deemed distributed would be deducted from the EDA. The shareholders would then be deemed to recontribute the distributed amount, and their share basis would increase by the amount of the deemed distribution. Share basis would increase only by the amount deemed reinvested (rather than by the corporation's pre-tax earnings), because that would be the result had the shareholder actually reinvested a dividend.

Mechanically, the electing corporation would declare deemed dividends in the same manner that it declares actual dividends. A corporation would

choose the amount of deemed dividends and the classes of stock on which they would be paid. The corporation's ability to stream deemed dividends to taxable shareholders would be constrained by the anti-streaming rules generally applicable under the prototypes for payments of excludable dividends.³ The corporation would allocate the deemed dividends to holders of stock on the chosen record date and would provide information reports to those shareholders showing the amount of the deemed dividend and the associated basis increase.

Dividends are generally paid on a per share basis, and the share basis increase under the DRIP also would be on a per share basis. It would be desirable to have a uniform convention governing the allocation of such basis, e.g., equally to each share or in proportion to the existing basis.

Example 1. Corporation X adopts a DRIP and makes a deemed distribution of \$100 to Shareholder A. The fair market value of X shares on the date of the deemed distribution is \$20 per share. A owns 10 shares of X which he purchased in two lots, Lot A (5 shares at \$4 each) and Lot B (5 shares at \$6 each). If basis is allocated on a per share basis, the basis of each Lot A share will be \$14 and each Lot B share will be \$16.

Although a shareholder may have purchased various shares of a corporation's stock for different amounts, the treatment of each share under current law as having a separate basis may be questioned. If the shares are economically equivalent, it may be appropriate to require the shareholder to recognize the same gain or loss regardless of which shares are actually sold. For example, a DRIP could be used to reduce basis disparities.

Example 2. The facts are the same as in Example 1, except that the fair market value of X shares on the date of the deemed distribution is \$15 per share. The DRIP basis increase could be allocated between the Lot A and Lot B shares so that the shares in each lot have a basis of \$15.

For some shareholders (particularly those with recently purchased shares), a DRIP may create

share basis in excess of fair market value, with the result that capital losses will be realized when the shares are sold. Such losses may serve the same function as those discussed in Section 8.A, simply "reversing" the double tax imposed on the seller of shares. In other cases, however, it may be appropriate to craft anti-abuse rules to prevent a DRIP from being used to create basis in excess of fair market value.⁴

The dividend exclusion and CBIT prototypes generally adopt stacking rules that treat distributions as made first from fully-taxed income. If a DRIP is adopted, further stacking rules would be necessary to determine whether cash distributions on a class of stock following deemed dividends on that class of stock are first a recovery of basis from the DRIP or out of other earnings. Thus, issuers would keep an account of deemed dividends made on each class of stock (the deemed dividend account), in addition to the EDA.⁵ To simplify the operation of these accounts and minimize the double taxation of retained earnings, we recommend that all cash distributions, including cash distributions on shares on which deemed dividends have previously been paid, be treated first as payments out of any remaining balance in the corporation's EDA. Then cash distributions on a class of stock on which deemed dividends had been paid would be treated as a return of capital to the extent of the balance in the deemed

dividend account for that class of stock. The deemed dividend account would be reduced by the amount of dividends treated as a return of capital under this rule. Distributions in excess of the deemed dividend account for a class of stock would be governed by the prototype's rules applicable to distributions in excess of the EDA.⁶

9.B DESIGN CONSIDERATIONS

We anticipate that deemed distributions will, in practice, be made only to holders of common (or at least participating) equity, because holders of preferred stock typically require cash dividends. Restrictions limiting DRIP distributions to common and participating equity could be considered if it were feared that DRIPs could permit inappropriate losses, e.g., distributions on preferred stock bearing limited dividends and a fixed liquidation or redemption value might create such a result.⁷

In addition, DRIPs could be made mandatory on the theory that double taxation of retained earnings through capital gains taxation could be minimized by forcing basis allocations as promptly as possible.⁸ However, there seems to be little reason why corporations should not be permitted to control this, as other aspects, of their distribution policy.

CHAPTER 10: TRANSITION CONSIDERATIONS

10.A INTRODUCTION

Under current law, investors and corporations generally have made decisions and commitments based on the two-tier corporate tax system. Investors' decisions to invest in corporate or noncorporate entities or in debt rather than stock, and corporations' decisions to distribute earnings, to issue debt or equity, or to recognize gains inherent in appreciated assets all likely have been made with an expectation that corporate equity income will likely continue to be subject to tax at two levels. Introduction of an integrated system will alter these expectations. We believe that a transition period is appropriate to prevent undue dislocation and to mitigate transitional gains and losses.

We anticipate that shifts in investors' portfolios will occur under any integration proposal and, in some cases, such shifts may be substantial. While the magnitude of such shifts will vary with the degree of difference between the integration proposal and current law, prudence suggests that phased-in implementation will permit adjustment to the new system while mitigating transition gains and losses. It also will provide an opportunity for midcourse corrections, if needed. A phase-in appears to be the simplest form of transition for both taxpayers and administrators to implement. It will not require complicated rules of uncertain duration for preenactment assets.

10.B TAXATION OF TRANSITIONAL GAINS AND LOSSES

Some believe that it is important for transitional rules to deal explicitly with gains and losses arising from the shift to an integrated system.¹ Several sources of such transition gains and losses can be identified. First, the shift to integration may affect the value of corporate shares.² Second, at the time of the shift, corporations may hold assets with unrealized built-in gains or losses and hence face different tax consequences upon

realization than under existing law. (Absent specific transitional rules for built-in gains and losses, the second effect will likely become a part of the first effect.) Finally, some corporations may have retained earnings which have been realized and taxed while others may have distributed such earnings. The former may gain advantage if the retained earnings are not taxed on distribution.³

While we favor a phase-in of integration primarily to allow for gradual portfolio shifting and to allow assessment of integration's impact as it is implemented, we do not favor other explicit transitional rules to deal with transition gain and loss. Phase-in itself will mitigate the impact of any change in share values.⁴

Built-in gains and losses are likely to be reflected in share value; in any event, the differing tax consequences that will occur arise primarily by virtue of the realization concept fundamental to current income tax law. Prior law changes (including significant rate changes) generally have not attempted to capture this form of transition gain (other than through phase-in) and we believe that result is appropriate in the shift to integration as well.

Differences in earnings distribution policies are likely to be significant only in certain forms of integration. They could be significant, for example, in the shareholder allocation prototype. Because that prototype taxes only current corporate income and treats distributions as a return of capital, corporations that retained earnings realized under current law could be significantly favored over those that distributed such earnings. In contrast, the dividend exclusion and CBIT prototypes' EDA mechanisms will cause distributions from earnings retained before the establishment of the EDA to be taxable to the shareholder when distributed.⁵ Accordingly, both the dividend exclusion prototype and CBIT will produce results for pre-integration retained earnings similar to current law.⁶

As an alternative, some form of grandfathering of existing assets or activities could be used to limit or eliminate transition gains and losses from the shift to integration. Under such an approach, current law treatment would be retained for assets that otherwise would be treated more favorably under integration to preserve asset values that reflect the classical corporate tax system. In moving to integration, however, a permanent grandfather rule would require maintaining a distinction between pre-enactment and post-enactment assets and equity interests and, in CBIT, old and new debt as well. Making such distinctions over an extended period would create difficult, if not impossible, reporting burdens and administrative complexity and would inevitably result in uneven enforcement.⁷ Such an approach also could require an extensive array of rules to prevent transformation of old equity into new equity and to govern conversions of non-corporate entities to corporate status.⁸ More importantly, preserving a dual system to limit the benefits of integration to new equity, would thwart the goal of economic reform by perpetuating the very distortions the new system seeks to eliminate.⁹ We have rejected such an approach on grounds of both efficiency and simplicity.

10.C PHASE-IN OF INTEGRATION

Phase-ins have been used in recent legislation to moderate the harsh effects of significant changes in the tax law. For example, the passive loss disallowance rules, the personal interest disallowance rules, and the new investment interest limitations adopted in the Tax Reform Act of 1986 all were phased in.¹⁰

We generally recommend that a phase-in approach be used to implement the transition from the classical system to an integrated corporate tax. A phase-in approach would moderate the transition effects of integration, while avoiding the serious drawbacks of limiting integration to new equity. While some transition gains and losses may occur, fundamental structural changes in the tax law, such as those proposed here, simply are not feasible if substantial changes in values of taxpayers' assets must be avoided. Indeed, such

changes have typically been ignored in connection with rate changes that raise similar concerns. A phase-in also would mitigate the revenue effects relative to immediate change. A phase-in would delay application of the new rules, however, and the delay would reduce the present value of the desired economic changes.

Under a phase-in approach, integration would be introduced gradually over a designated period. This approach would reduce the magnitude of transition gains and losses. A phase-in would not distinguish between old and new equity or, in the CBIT prototype, old and new debt. Although there would be some delay in full implementation of integration under a phase-in approach, this delay would be of limited duration, in contrast to the virtually indefinite delay that would result from limiting integration to new equity. The length of the phase-in period should depend on a variety of factors, including the particular integration prototype adopted. An appropriate period should be selected by striking a balance between the need to mitigate the disruption to the status quo and the desire to achieve as expeditiously as possible the full value of the anticipated gains of the new system, taking into account administrative costs.

The dividend exclusion prototype could readily be phased in. The EDA would automatically limit the amounts of dividends excludable by shareholders to the amount of earnings taxed after enactment, although stacking distributions first against the EDA would tend to accelerate the benefits of integration. See Section 2.B. Additional rules distinguishing pre-enactment from post-enactment earnings would not be necessary. Because the dividend exclusion prototype requires relatively few changes to current law, the appropriate phase-in period for that prototype might be relatively short, e.g., 3 to 5 years. Mechanically, a phase-in approach would allow a corporation to pay excludable dividends to the extent of its EDA balance but would limit additions to the EDA to reflect the phase-in, e.g., amounts based on 25 percent of corporate taxes paid in the first year after enactment, 50 percent in the second year, and so on.¹¹

In contrast, a phase-in of the shareholder allocation prototype appears complex. Attributing a portion of corporate tax to shareholders in a manner that would increase the portion of corporate income so taxed over time, would require a complex system for tracking corporate income and making share basis adjustments, for example, to determine how subsequent distributions of phase-in years' earnings would be taxed. On balance, if a shareholder allocation system were desired, it might be preferable to enact the system in its entirety with a delayed effective date. A delayed effective date would have effects similar to a phased-in effective date in reducing transition gains and losses, would allow taxpayers an opportunity to plan for the shift, while avoiding the complexity of a phase-in of the shareholder allocation prototype.¹²

The CBIT prototype generally eliminates the investor level tax on dividends and interest and disallows the interest deduction to corporations and other CBIT businesses. In addition to the transition gains and losses that might occur under the other integration prototypes, under CBIT lenders to CBIT entities might enjoy an increase in the value of existing debt with the elimination of tax on interest received. The magnitude of the increase would depend on a variety of factors, including the remaining term of the debt. From the borrower's perspective, the disallowance of interest deductions would effectively increase the cost of borrowing for corporations unable to call their bonds or otherwise refinance their debt.¹³

CBIT, therefore, should probably be phased in over a longer period than would be appropriate for the dividend exclusion prototype. Longer phase-ins have greater effect in reducing transition gains and losses. Because, as detailed in Chapter 4, a CBIT regime will continue to have certain types of includable interest (such as interest on Treasury securities) even when fully phased in, proportionate adjustments during the phase-in period would add complexity but should not create insurmountable recordkeeping problems for investors.

Although eliminating the interest deduction ultimately could make certain limitations on interest deductibility applicable to CBIT entities unnecessary,¹⁴ they would remain important during the phase-in period. Indeed, a phase-in of CBIT may require some strengthening of rules to prevent acceleration of interest deductions to earlier years of the phase-in, as well as deferral of interest income into later years of the phase-in. Transition rules also would have to address the timing mismatches that arise where interest has been deducted by the payor but not yet included in income by the lender or where interest has been included by the lender but not yet deducted by the payor. Alternatively, transition to CBIT could be accomplished by beginning with implementation of the dividend exclusion prototype.

10.D MECHANICS OF A PHASE-IN

Dividend Exclusion Prototype. A dividend exclusion could be phased in over 4 years, for example, by crediting the EDA with an increasing percentage of the fully phased-in EDA amount in each transition year, i.e., 25 percent of the formula amount in the first year, 50 percent in the second, 75 percent in the third. Offsetting revenues could be phased in on the same schedule. By limiting additions to the EDA at the corporate level, shareholder level phase-in will not be required. However, only 25 percent of income taxed at the corporate level in the first year could be distributed tax-free to shareholders. Distributions in excess of this amount, like other distributions in excess of the EDA, would be taxable to the shareholder.

CBIT. CBIT is self-financing through the disallowance of the entity level interest deduction. Accordingly, the CBIT phase-in must coordinate the dividend and interest exclusions for shareholders with entity level interest disallowance. For each year of the CBIT phase-in, the EDA would be credited with an increasing percentage of the fully phased-in EDA amount and the same percentage of corporate interest deductions would be disallowed, i.e., 10 percent in the first year,

20 percent in the second, etc.. In addition, it would be necessary to credit the EDA with an additional amount equal to the phase-in percentage for the year multiplied by the sum of the allowable interest deduction for the year plus interest paid during the year but deducted in a year before phase-in begins.¹⁵ Absent this adjustment, the CBIT compensatory tax or investor level tax on distributions in excess of the EDA would treat allowable interest like a preference and the income it offsets would be taxed when distributed. Unlike the dividend exclusion prototype, CBIT requires investor level phase-in to mitigate and smooth portfolio shifts during the phase-in period. Thus, debtholders would exclude 10 percent of interest received from a CBIT entity in the first year while shareholders would exclude 10 percent of dividends received.

Example 1. A CBIT entity earns \$109 of gross income and has \$10 of interest expense in the first year of a 10 year phase-in of CBIT. If the CBIT phase-in percentage were 10 percent, the CBIT entity would deduct \$9 of interest (\$10 minus (10 percent of \$10)). It would thus have taxable income of \$100 and pay CBIT of \$31.

The amount added to the entity's EDA is \$7.80, computed as follows:¹⁶

$$\begin{array}{r} \$6.90 \text{ (10\% of } (\$31/.31 - \$31)) \\ + .90 \text{ (10\% of } \$9 \text{ interest allowed as a} \\ \text{deduction)} \\ \hline \$7.80 \end{array}$$

Debtholders would be entitled to exclude \$1.00 of the \$10.00 in interest they receive, thereby reducing the EDA to \$6.80.¹⁷ If the entity distributed its remaining after-tax earnings of \$68 (\$109 minus \$10 interest minus \$31 tax) to shareholders, shareholders could exclude \$6.80 from income, thereby reducing the EDA to zero.

Example 2. The facts are the same as in Example 1 except that the entity made no distribution to shareholders in the first year and it has identical income and interest in the second year. Thus, it has \$109 of gross income and is allowed an \$8 interest deduction, resulting in \$101 of taxable income.

The entity's EDA is computed as follows:

$$\begin{array}{r} \$6.80 \text{ (balance of EDA from year 1)} \\ 13.94 \text{ (20\% of } (\$31.31/.31 - \$31.31)) \\ \hline 1.60 \text{ (20\% of } \$8 \text{ interest allowed)} \\ \hline \$22.34 \end{array}$$

Debtholders in this year would be entitled to exclude \$2.00 of the \$10.00 in interest they receive, reducing the EDA to \$20.34. If the entity distributed its \$68 in after-tax earnings from year 1 plus its \$67.69 in after-tax earnings from year 2 (\$109 minus \$10 interest minus \$31.31 tax), shareholders would be entitled to exclude 20 percent of the \$135.69 dividend or \$27.14. This amount exceeds the EDA balance of \$20.34 because only 10 percent of the earnings from year one are reflected in the EDA. To compensate for the 20 percent exclusion at the shareholder level, a 31 percent compensatory tax of \$2.11 is imposed on the \$6.80 differential. (Thus, the differential amount is treated like retained earnings from pre-CBIT years.)

Example 3. The facts are the same as in Example 1, except that the entity earns \$20 in preference income in addition to the \$109 in gross income. Thus, its after-tax earnings available for distribution to shareholders in year 1 would be \$88 (\$68 + \$20). If it distributed the entire \$88 in year 1, shareholders could exclude 10 percent of that amount, or \$8.80. As a result, a 31 percent compensatory tax of \$.62 is imposed on the \$2.00 by which the shareholder exclusion exceeded the EDA balance (\$8.80 - \$6.80). This amount also is 10 percent of the entity's preference income.

As the foregoing examples indicate, a uniform investor level phase-in of CBIT could be more easily accomplished if the prototype includes a compensatory tax. If CBIT does not include a compensatory tax, and instead investors are subject to tax on preference and sheltered foreign source income, a phase-in might be accomplished by limiting the portion of dividends and interest that are excludable to the lesser of (1) the phase-in percentage multiplied by the amount of the payment and (2) the EDA balance. As a consequence, all payments would be excludable up to the phase-in percentage to the extent of the EDA, and all payments thereafter would be taxable.

PART IV: THE ROADS NOT TAKEN

INTRODUCTION

Under an imputation credit system, a shareholder would be taxed on the gross amount of a dividend, including both the cash dividend and the associated tax paid at the corporate level. The shareholder would receive a credit equal to the amount of corporate tax associated with the gross dividend. From an individual shareholder's viewpoint, this system would mean that the corporate tax on earnings distributed as dividends would generally resemble the current withholding tax on wages and salaries. An employee includes gross wages in his taxable income and receives a credit against tax liability equal to the amount of tax withheld by the employer. Because of the prevalence of imputation credit systems abroad, such a system would facilitate international coordination of corporate tax regimes, especially in the context of bilateral treaty negotiations.¹ We therefore had expected to recommend an imputation credit system as our preferred form of distribution-related integration.

After a close examination of the imputation credit system, reflected in Chapter 11, we determined that its principal advantage is its flexibility to respond to different policy judgments on the

most important issues of integration. For example, an imputation credit can extend the benefits of integration to tax-exempt and foreign shareholders by allowing refundability of imputation credits or it can deny such benefits by denying refunds. Its major drawback is its complexity in creating an entirely new regime for taxing corporate dividends. On balance, we concluded that the dividend exclusion prototype set forth in Chapter 2 was the preferable distribution-related integration alternative because it would implement our policy recommendations, including such issues as the treatment of preferences and tax-exempt and foreign shareholders, in a substantially simpler manner.

An imputation credit system may not be the most straightforward distribution-related integration alternative even if policymakers were to choose policy goals different from ours. A dividend deduction system, described in Chapter 12, also would be simpler than an imputation credit system if policymakers chose to extend the benefits of integration to tax-exempt and foreign shareholders.²

CHAPTER 11: IMPUTATION CREDIT SYSTEM

11.A OVERVIEW OF IMPUTATION CREDIT PROTOTYPE

In producing this Report, we looked carefully at the integration systems of other countries. See Appendix B. The imputation credit prototype set forth in this chapter is the one we consider to be most consistent with our policy recommendations. It closely resembles the system that New Zealand adopted in 1988.

Mechanics. Corporations would continue to determine income under current law rule and pay tax at a 34 percent rate. Shareholders receiving a distribution treated as a dividend would include the grossed-up amount of the dividend in income—including both the amount of cash distributed and the imputation credit allocated to the dividend—and could use the credit to offset their tax liability. The credit would be non-refundable; it could reduce tax liability to zero, but would not produce a refund. Credits would be allowed only for taxes paid after the effective date of the proposal.

Allowing a credit for the full amount of corporate tax paid with respect to distributed earnings would eliminate the corporate level tax if the shareholder's tax rate at least equals the corporate rate. Even if the shareholder rate were less than the corporate rate, the corporate tax could be eliminated if the credit were allowed against tax on other income or as a refund. Currently, the maximum statutory rate for individual shareholders (31 percent) is less than the corporate rate of 34 percent. Thus, if the credit were computed at the full corporate rate, most shareholders could shelter other income from tax or claim refunds. This need not be permitted, however, if the goal of the imputation credit prototype is simply to ensure that distributed earnings that are taxed at the corporate level are not taxed again to shareholders. Accordingly, rather than allowing a credit for the full amount of corporate tax paid on a distribution, the prototype computes the amount of the credit at the 31 percent maximum shareholder rate. This approach does not

eliminate the corporate level tax. However, it would generally permit shareholders to pay no additional tax on distributions of corporate earnings that have already been taxed fully at the corporate level, while ensuring that shareholders taxable at the maximum individual rate do not use excess credits to shelter other income from tax or to claim refunds.¹ Section 11.B explains how taxes paid at the corporate rate are converted into imputation credits at the shareholder rate.

A corporation would maintain an account of its cumulative Federal income taxes paid, computed as though its taxable income had been subject to tax at a rate of 31 percent (the shareholder credit account or SCA). A corporation could elect to attach a credit to a dividend (frank the dividend) in any amount, provided it does not exceed the lesser of (1) the adjusted corporate level tax (computed at the 31 percent rate) on the pre-tax earnings that generated the dividend (the grossed-up dividend),² or (2) the balance in the SCA.³ The corporation would reduce its SCA balance by the amount of credits used to frank dividends and by refunds of corporate tax. It would increase its SCA by payments of corporate tax and by credits attached to dividends received from other corporations.

Tax-Exempt Shareholders. The prototype would effectively retain the current level of taxation of income earned on corporate equity supplied by tax-exempt shareholders. The credit would be nonrefundable, and fully-taxed income distributed to tax-exempt shareholders would continue to bear one level of tax: the corporate tax. Preference income distributed to tax-exempt shareholders generally would continue to be untaxed both at the corporate and shareholder level.

Corporate Shareholders. The dividends received deduction would be increased to 100 percent for all intercorporate dividends, and any imputation credits attached to a dividend would be added to the recipient corporation's SCA.

Tax Preferences and Foreign Source Income.

By adding only U.S. taxes to the SCA and requiring that imputation credits be paid out of the SCA, the prototype ensures that the credit is allowed only to the extent of U.S. corporate tax payments. By generally allowing corporations to decide how much credit to attach to a particular distribution, the prototype allows a corporation to treat distributions as coming first from fully-taxed income and then from preference income and foreign source income shielded from U.S. tax by foreign tax credits. The prototype does not impose a compensatory tax on distributions out of preference or shielded foreign source income. Therefore, the prototype permits a corporation to make distributions out of preference or shielded foreign source income without incurring additional corporate level tax liability. However, shareholders may not claim credits with respect to such distributions. This results in distributed preference income and shielded foreign source income continuing to be subject to the same level of taxation as under present law.

Foreign Shareholders. The prototype also retains the current law treatment of foreign shareholders. The credit would be nonrefundable to foreign shareholders, absent treaty provisions to the contrary, and dividends would be subject to U.S. withholding tax to the same extent as under current law.

Anti-abuse Rules. The imputation credit prototype generally permits a corporation to frank dividends in any amount (subject to a maximum), even if they have a remaining SCA balance. This treatment is more liberal than the dividend exclusion prototype, which requires corporations to pay fully excludable dividends (equivalent to fully franked dividends) until their EDA is exhausted. Permitting this additional flexibility in the imputation credit prototype may require additional anti-abuse rules to prevent corporations from attaching credits to distributions to taxable shareholders and

not attaching credits to distributions to shareholders with low or zero U.S. tax liability, such as tax-exempt and foreign shareholders. See Section 11.F.⁴

Capital Gains and Share Repurchases. Chapter 8 discusses the treatment of capital gains on sales of corporate stock and the treatment of share repurchases.

Structural Issues. The prototype generally maintains current law rules for corporate acquisitions, although new rules would be needed to govern the carryover or separation of corporations' SCA balances in acquisitive and divisive reorganizations.

Impact on tax distortions. Table 11.1 illustrates the impact of the imputation credit prototype on the three distortions integration seeks to address: the current law biases in favor of corporate debt over equity finance, corporate retentions over distributions, and the noncorporate over the corporate form. The only difference between the current law treatment of nonpreference, U.S. source business income and its treatment under the imputation credit prototype is on corporate equity income distributed to individual investors. The prototype would reduce the tax rate on such income to t_c (when $t_i = t_i^m$) or a lower rate (when $t_i < t_i^m$), but as long as $t_c > t_i^m$, the rate will be greater than t_i . Thus, while the rate on corporate equity income distributed to individuals would be reduced, it would still be higher than the rate (t_i) imposed on noncorporate equity income and on interest. It would be lower, however, than the rate on undistributed corporate equity income. Some bias toward debt finance and the noncorporate form would remain, while the bias toward corporate retentions would tend to be reversed, in the absence of a DRIP. See Chapter 9 and Section 11.I. For tax-exempt and foreign investors, there would be no change in the tax treatment of nonpreference, U.S. source income.

11.B CHOICE BETWEEN A CREDIT LIMITATION SYSTEM AND A COMPENSATORY TAX SYSTEM

Introduction

As set forth in Chapter 5, this Report recommends that integration not become an occasion for extending the benefit of corporate tax preferences to shareholders. In implementing this decision in an imputation credit system, the most significant choice is between a shareholder credit limitation system (in which tax is collected only at the shareholder level on distributed preference income) or a compensatory tax system (in which a tax, creditable by shareholders, is collected at the corporate level on distributed preference income). The choice between a credit limitation system and a compensatory tax system also is influenced by the policy recommendations set forth in Chapters 6 and 7 not to eliminate the corporate level tax on earnings distributed to tax-exempt and foreign shareholders and not to treat identically U.S. corporate level taxes paid and foreign taxes on corporations' foreign source income. These policy recommendations imply that imputation credits should not be refundable to tax-exempt or foreign shareholders and that foreign corporate level taxes should not be creditable by shareholders.

The choice between a credit limitation system and a compensatory tax system may differ depending upon the kind of integration mechanism adopted. For example, in the dividend exclusion prototype, we chose to follow a credit limitation-type approach and to tax distributed preference income only at the shareholder level. This allows adoption of the dividend exclusion prototype with minimal changes from current law and would continue current law treatment of dividends paid out of preference or foreign source income. In

Table 11.1
Total U.S. Tax Rate on a Dollar of NonPreference, U.S. Source Income from a U.S. Business Under Current Law and an Imputation Credit Prototype

Type of Income	Current Law	Imputation Credit Prototype
I. Individual Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_i$	$[(1 - t_i)t_c + t_i - t_i^m]/(1 - t_i^m)$
Undistributed	$t_c + (1 - t_c)t_g$	$t_c + (1 - t_c)t_g$
Noncorporate Equity	t_i	t_i
Interest	t_i	t_i
Rents and Royalties	t_i	t_i
II. Tax Exempt Entity is Income Recipient		
Corporate Equity:		
Distributed	t_c	t_c
Undistributed	t_c	t_c
Noncorporate Equity	t_c	t_c
Interest	0	0
Rents and Royalties	0	0
III. Foreign Investor is Income Recipient		
Corporate Equity:		
Distributed	$t_c + (1 - t_c)t_{WD}$	$t_c + (1 - t_c)t_{WD}$
Undistributed	t_c	t_c
Noncorporate Equity	t_{WN}	t_{WN}
Interest	t_{WI}	t_{WI}
Rents and Royalties	t_{WR}	t_{WR}

Department of the Treasury

Office of Tax Policy

t_c = U.S. corporate income tax rate.

t_i = U.S. individual income tax rate.

t_i^m = Maximum U.S. individual income tax rate.

t_g = U.S. effective individual tax rate on capital gains.

t_{WD} , t_{WN} , t_{WI} , t_{WR} = U.S. withholding rates on payments to foreigners of dividends, noncorporate equity income, business interest, and rents and royalties, respectively. Generally varies by recipient, type of income, and eligibility for treaty benefits, and may be zero.

addition, because the dividend exclusion prototype applies only to corporate equity, a compensatory tax would tend to increase the incentive for corporations with preference income to issue debt rather than equity to tax-exempt and foreign investors. For similar reasons, we adopt a credit limitation approach in the imputation credit prototype.

Experience in other countries makes clear that an imputation credit system can accommodate

either a credit limitation or a compensatory tax, however. Australia and New Zealand, for example, adopted credit limitation systems, while France, Germany, and the United Kingdom adopted compensatory tax systems.⁵

Comparison of a Compensatory Tax and Credit Limitation

Under current law, preference income distributed to tax-exempt shareholders is not subject to tax at either the corporate or the shareholder level. If a compensatory tax were imposed on preference income at the corporate level and not made refundable to tax-exempt shareholders, a compensatory tax would impose an additional tax on such income.⁶ Similarly, under current law, preference income distributed to foreign shareholders is subject only to the 30 percent withholding tax (often reduced to as little as 5 percent by treaty). If distributed preference income were subject to a compensatory tax at the corporate level and the imputation credits could not be used against the foreign shareholders' withholding tax, the net tax burden on that income would increase.

A similar problem arises with distributions of foreign source income earned by a U.S. corporation and taxed abroad. As discussed in Chapter 7, this Report recommends that foreign taxes remain creditable at the corporate level, but that foreign taxes not be treated the same as U.S. taxes paid in determining imputation credits. Under such a rule, distribution of foreign source income that has not borne any residual U.S. tax would be fully taxable at the shareholder level, as under current law. A nonrefundable compensatory tax on distribution of foreign source income shielded from U.S. corporate tax by foreign tax credits would increase the tax burden on distributions of such income to foreign and tax-exempt shareholders relative to the burden on such income under current law.

Because of the additional corporate level tax imposed by a nonrefundable compensatory tax on preference and foreign source income distributed to tax-exempt or foreign shareholders, the compensatory tax and credit limitation systems have

very different implications for corporations that currently pay little U.S. tax, due either to substantial use of tax preferences or to foreign tax credits. Under current law these corporations incur little or no United States corporate level tax, but the dividends paid do bear a shareholder level tax (except in the case of tax-exempt shareholders).

A credit limitation system allows corporations to continue to pay dividends out of preference or foreign source income without incurring any additional corporate level tax. In contrast, a compensatory tax system would require such corporations to pay an extra corporate level tax in order to maintain their current level of dividend payments. In practical terms, a compensatory tax may create an extra tax cost for corporations engaged in tax-favored activities, such as research and experimentation and oil and gas exploration⁷ and may affect large multinational corporations doing business in high-tax foreign jurisdictions, such as certain European countries. In addition, U.K. experience with a nonrefundable compensatory tax suggests that corporations that would be subject to such taxes will engage in tax planning behavior to avoid its burdens. Nevertheless, a compensatory tax does promote simpler administration, since it collects tax on distributed corporate preference or foreign source income at the corporate level.⁸

The extent to which additional tax burdens would be created by a compensatory tax system depends on the method for determining when a distribution is made out of income that has not borne U.S. tax.⁹ A stacking rule that treats all distributions as having borne tax at the full corporate rate (to the extent possible based on total corporate tax paid) may mitigate the imposition of a compensatory tax. If distributions do not exceed fully-taxed income, no compensatory tax is due. Choice of a particular stacking rule also affects both the revenue effects of distribution-related integration and corporate incentives to pay dividends. In this and other prototypes, we have consistently rejected a stacking rule that would treat dividends as made first from preference income, and we have been unable to discover any

country that stacks preferences first in its distribution-related integration system. Although that rule would reduce the revenue loss from adoption of distribution-related integration, it also would discourage payment of dividends.¹⁰ Most foreign systems stack preferences last. See Appendix B.

A credit limitation system may be somewhat more complex to administer than a compensatory tax system, because it requires shareholders to apply a different rate of gross-up and credit for each distribution from each corporation. In contrast, under a compensatory tax, all distributions from all corporations are subject to gross up and credit at the same rate. From the shareholder's point of view, however, a credit limitation system may not be significantly more complicated. Under either system, the shareholder must compute tax using two pieces of information—the amount of the cash dividend and the associated credit (also used to compute the grossed-up dividend). The only necessary difference between the two systems is that under a compensatory tax system the credit rate can be provided by instructions to the tax form, while under a credit limitation system it would have to be provided by information returns, which may reflect differing amounts of credit for different corporations and in different years.

Both compensatory tax systems and credit limitation systems have posed problems for countries that have adopted them. For example, the United Kingdom imposes a compensatory tax by collecting Advance Corporation Tax (ACT) on all distributed earnings at the time of distribution. ACT is then creditable against regular tax.¹¹ The United Kingdom has found that many corporations with a large amount of preference or foreign source income have built up substantial excess ACT accounts rather than reduce their dividend payments. The likelihood of excess ACT accounts has led to tax planning efforts to avoid imposition of compensatory taxes and the existence of excess ACT accounts promotes efforts at trafficking in tax attributes. However, credit limitation systems have had problems in creating and enforcing effective antistreaming rules. Both the Australian and New Zealand systems contain an extensive network of such rules.

On balance, we believe that a credit limitation system is preferable to a compensatory tax in both the imputation credit prototype and the dividend exclusion prototype. In both cases, a credit limitation system would permit corporations to maintain their current dividend policy without the imposition of additional corporate level tax.

Mechanics of a Shareholder Credit Limitation System

Under the imputation credit prototype, corporations would keep track of cumulative taxes paid by maintaining a Shareholder Credit Account (SCA)—an account of cumulative creditable taxes paid. A corporation would be allowed to attach a credit to a dividend (frank the dividend) in any amount, up to a limit. The credit attached could not exceed the lesser of (1) an amount equal to the product of (a) the distribution and (b) the ratio of the current maximum shareholder tax rate to 1 minus the current maximum shareholder tax rate, or (2) the balance in the SCA. The corporation would reduce the balance in the SCA by the amount of credits used to frank dividends and refunds of corporate tax and increase the SCA by payments of corporate tax (including estimated tax) and imputation credits attached to dividends received.

For example, consider a corporation with taxable income of \$100. Assuming a 34 percent corporate tax rate and a 31 percent shareholder rate, it would pay a tax of \$34 and have \$66 available for distribution. The corporation would add \$29.65 to its SCA account. The amount added to the SCA is determined using the following formula:

Annual additions to SCA =

$$\left(\frac{1}{.69} - 1 \right) \left[\frac{\text{U.S. tax paid for taxable year}}{.34} - \text{U.S. tax paid for taxable year} \right]$$

+ imputation credits on dividends received

This is the amount of tax that would fully frank, at the 31 percent shareholder rate, the corporation's actual after-tax income of \$66 (\$100 - \$34).¹²

If the corporation distributed a cash dividend of \$33, the corporation could elect to frank the dividend in any amount up to \$14.83 (determined by multiplying the amount of the distribution by .4493 (the shareholder rate divided by one minus the shareholder rate). The corporation would reduce the SCA by the amount of the credit. Thus, if the corporation chose to fully frank the dividend, the shareholder would report as income the gross dividend of \$47.83 (\$33 plus \$14.83) and claim a credit of \$14.83 against the individual tax. If the \$14.83 credit exceeded the shareholder level tax imposed on the \$47.83 gross dividend, a low-bracket shareholder could use the excess credit to offset tax imposed on other income. For example, a shareholder in the 31 percent bracket would incur tax liability on the gross dividend of \$14.83 ($.31 \times \47.83) and would receive a credit of \$14.83, exactly offsetting the tax due. A shareholder in the 15 percent bracket would incur tax liability on the gross dividend of \$7.17 ($\47.83×15 percent) and would receive a credit of \$14.83, leaving an excess credit of \$7.66 to offset other tax liability.¹³

The imputation credit prototype requires corporations to report annually to each shareholder and to the IRS the amount of dividend distributions to shareholders and the associated imputation credits. The imputation credit prototype also requires corporations annually to report to the IRS the adjustments to and balance in the SCA. This would permit the IRS to verify aggregate allowable credits to a corporation based on the amount of taxes paid and to compare the allowable amount with credits reported by shareholders.

A liquidating corporation would distribute the remaining balance in its SCA among shareholders in proportion to the amount of other assets distributed to them. As with any other distributions for which imputation credits are allowed, the amount of the shareholder credit would be included in income and could be used to offset gain on the liquidation or, in the case of excess credits, other income.

The imputation credit prototype, like the dividend exclusion prototype, treats adjustments to

prior years' tax liability as adjustments made in the current year.¹⁴ Thus, an increase in corporate tax liability for a prior year would result in an increase in the SCA for the year of the audit adjustment. A decrease in a prior year tax liability could give rise to a refund, but only to the extent of the current balance in the SCA. Any excess amount would be carried forward to be applied against future corporate taxes.¹⁵

This method ensures that an adjustment that affects a corporation's prior year tax liability would not affect shareholders' individual tax positions for the prior year. Shareholders may thus claim the credits reported to them as allowable by the corporation, without concern that subsequent corporate level adjustments might require them to file amended returns.¹⁶

The imputation credit prototype allows corporations to carry back losses to claim refunds only to the extent of any balance in their SCA, with the SCA being reduced by the amount of the refund. This limitation prevents corporations from carrying back losses in order to obtain a refund of taxes that already have served to reduce shareholders' taxes through imputation credits attached to dividends.¹⁷ Any unused losses can be carried forward as under present law.¹⁸

The prototype generally permits corporations to choose the extent to which dividends are franked, with the consequence that there is no need for a mandatory stacking rule. This flexibility allows a corporation with preference or foreign source income to continue to determine its dividend policy by weighing the business reasons for maintaining a particular level of cash distributions against the possible detriment to shareholders of receiving unfranked dividends. In contrast, the dividend exclusion prototype requires excludable dividends to be paid until the EDA balance is exhausted. This is equivalent to an imputation credit system that requires corporations to pay fully franked dividends to the extent of the SCA. Permitting the additional flexibility to pay partially franked dividends requires anti-abuse rules in addition to those adopted in the dividend exclusion prototype to prevent corporations from

paying franked dividends to taxable shareholders and unfranked dividends to tax-exempt shareholders. See Section 11.F.

Corporate Shareholders

The imputation credit prototype allows a corporate shareholder a 100 percent dividends received deduction (DRD) for both franked and unfranked dividends, regardless of the degree of affiliation.¹⁹ Moving to a single level of tax under integration does not require increasing the DRD to 100 percent for unfranked and partially franked dividends. The dividend exclusion prototype, for example, retains current law for taxable dividends. See Section 2.B. The imputation credit prototype contains a 100 percent DRD for all dividends, however, because retaining current law for partially franked dividends would create unwarranted complexity.²⁰

As under current law, the DRD would be available for dividends from domestic corporations and for a portion of dividends from certain foreign corporations engaged in business in the United States. Any imputation credit associated with a dividend would be added to the corporation's SCA. Adding the credit to the corporate shareholder's SCA preserves imputation credits for individual shareholders when the earnings are ultimately distributed out of corporate solution.

Because the 100 percent DRD would be equally available for fully franked and unfranked dividends, distributions of corporate preference income would be taxed only when ultimately distributed to individual shareholders. Mechanically, this result occurs because unfranked dividends do not increase the recipient's SCA.²¹ Retaining the DRD for preference income is consistent with the rationale for a credit limitation system discussed above. Requiring immediate taxation in full of preference income received by corporate shareholders would represent a significant departure from current law and would increase the cost of intercorporate dividends. Preserving the DRD means that the ultimate taxability of preference income is determined at the individual level.²²

Other countries adopting distribution-related integration have dealt with the issues presented by affiliated groups in a variety of ways. In most cases, these countries have permitted the extension of preferences while the income remains in corporate solution, as we suggest here. For example, New Zealand generally exempts intercorporate dividends from taxation and corporate shareholders are permitted to add credits from franked dividends to their own SCA. Similar rules apply in Australia for dividends received by public corporations and for franked dividends received by private corporations from within the same closely held group. In the United Kingdom, although the intercorporate dividends are generally subject to ACT, a "group dividend election" can be made to avoid the ACT and the imputation of credits with respect to distributions between closely affiliated corporations. See Appendix B.

11.C ROLE OF THE CORPORATE ALTERNATIVE MINIMUM TAX

Under current law, the corporate alternative minimum tax (AMT) seeks to ensure that, in each taxable year, corporations pay a minimum amount of tax on their economic income. A corporation must pay the higher of the AMT or the regular tax liability on its alternative minimum taxable income (AMTI) for the taxable year. Congress adopted the corporate AMT system in 1986 partly in response to widely publicized reports of major companies not paying taxes in years in which they reported substantial earnings and, in some cases, paid substantial dividends to shareholders.²³

The imputation credit prototype retains the corporate AMT.²⁴ Because the imputation credit prototype described here does not substantially alter the current treatment of either retained or distributed preference income, the AMT would continue to serve its current function of limiting corporate tax preferences and ensuring that corporations continue to pay some minimum amount of tax on retained income.²⁵

Since some corporations are subject only to the AMT and pay no regular corporate tax for

long periods, the question whether the AMT should be considered taxes paid and added to the SCA is important. For these taxpayers, the corporate AMT is the only tax paid, and, despite the current law provisions that allow the AMT to be credited against regular corporate tax in subsequent years, it would not be realistic to view the AMT simply as an advance deposit against ultimate corporate tax liability. We therefore treat the AMT in the same manner as regular corporate taxes paid. Thus, each dollar of AMT is converted into an SCA balance using the formula set forth in Section 11.B.²⁶ At the corporate level, any AMT paid would continue to be carried forward and credited against regular corporate tax in subsequent years, but regular corporate tax that is not paid by reason of the credit allowed for AMT previously paid would not be treated as tax paid. Accordingly, under the prototype, both regular taxes paid and AMT paid would be added to the SCA, and regular tax that is offset by the AMT credit would not be added to the SCA. If the AMT were not treated as taxes paid, distributions attributable to earnings that have been subject to AMT would be taxed twice, and a higher rate of tax would be imposed on preference activities. However, if distributions are made with shareholder credits arising from payments of AMT, such reductions in the SCA will reduce the corporation's ability to pay franked dividends when the AMT reverses and the corporate tax is reduced by AMT credits.

11.D FOREIGN SOURCE INCOME

In general, the prototype permits a U.S. corporation to claim foreign tax credits against corporate tax to the same extent as under current law. A U.S. corporation, however, would increase its SCA only by the amount of the residual U.S. tax (if any) imposed on its foreign source income. Distributions out of foreign source income shielded from U.S. corporate tax by foreign tax credits generally would be unfranked and, therefore, would be taxed at the shareholder level as under present law.

Thus, U.S. corporate shareholders owning less than 10 percent of a foreign corporation's voting

stock (the threshold requirement for claiming an indirect foreign tax credit under IRC § 902) would include in income, as under current law, dividends from the foreign corporation and claim a foreign tax credit for foreign withholding taxes. The corporate shareholder, however, would not add foreign income taxes paid by the foreign corporation or foreign withholding taxes on dividends to its SCA.

U.S. corporate shareholders owning at least 10 percent of a foreign corporation's voting stock would continue to include in income dividends from the foreign corporation and to claim a foreign tax credit for foreign withholding taxes on the dividend as well as foreign taxes paid by the foreign corporation. The corporate shareholder would add to its SCA only the U.S. residual tax, if any, paid on the dividend.²⁷

U.S. corporations with foreign branch operations would continue to be subject currently to U.S. tax on their worldwide income with a credit for foreign income taxes imposed thereon.²⁸ As with earnings of foreign subsidiaries, the U.S. corporation would increase its SCA only by the amount of any residual U.S. tax imposed on the foreign source income.

The imputation credit prototype does not change the treatment of individuals owning stock in foreign corporations. U.S. individual shareholders would continue to include in income dividends received and claim a foreign tax credit for any foreign withholding taxes imposed on the dividend. Individual shareholders would not receive an imputation credit for any income taxes paid by the foreign corporation.

In connection with treaty negotiations with countries that have imputation credit systems, the United States may wish to consider whether imputation credits for foreign taxes paid could be extended on a bilateral basis. Serious complexities would arise, however, in applying at the individual shareholder level the foreign tax credit limitations that are designed to ensure that foreign taxes paid are not credited against U.S. taxes at tax rates in excess of the applicable domestic tax rate.

On the other hand, ignoring the foreign tax credit limitation would reduce or eliminate U.S. taxes on U.S. source income, in effect transferring domestic revenues to foreign treasuries. A possible approach might be to extend the benefits of foreign corporate taxes paid to individual U.S. shareholders in the form of a shareholder level exclusion of foreign source corporate income. Even in this event, care would need to be taken to avoid inappropriate results.²⁹

11.E CHOICES REQUIRED BECAUSE OF SHAREHOLDERS WITH DIFFERENT RATES

Tax-Exempt Shareholders

As discussed in Chapter 6, this Report recommends that integration retain the current treatment of corporate income distributed to tax-exempt shareholders.³⁰ Corporate taxable income would continue to bear one level of tax. Corporate preference income and foreign source income shielded from U.S. corporate tax by foreign tax credits would continue to be exempt from U.S. tax at both the corporate and shareholder level to the extent distributed to tax-exempt shareholders. Imputation credits could not be used against UBIT liability.³¹

Foreign Shareholders

Chapter 7 of this Report recommends that foreign shareholders making inbound investments should not by statute receive the benefits of integration available to U.S. shareholders, and that any such extension of the benefits of integration should occur only through treaties. Accordingly, the imputation credit prototype does not permit foreign shareholders to claim a refund of the imputation credit or to use the credit to offset withholding tax imposed on dividends. The 30 percent statutory withholding tax would continue to apply to the amount of the dividend without gross up, subject to applicable treaty reductions. The branch profits tax would continue to apply to U.S. branches of foreign corporations. Thus, a U.S. branch of a foreign corporation would be

taxable on its income effectively connected with a U.S. business (subject to any available treaty exemptions), and the branch's earnings withdrawn from the U.S. business (the dividend equivalent amount) would be subject to the branch profits tax under IRC § 884(a) (as modified by any applicable treaty), without credit for U.S. taxes paid on effectively connected income.

Denying imputation credits to foreign shareholders follows the approach generally adopted by our trading partners that have integrated corporate tax systems. Although the imputation credit would not be available to foreign shareholders as a statutory matter, a dividend to a foreign shareholder would reduce the distributing corporation's SCA by the same amount as if the distribution had been to a taxable domestic shareholder.³²

Low-Bracket Shareholders

The imputation credit prototype uses a rate of 31 percent to compute the shareholder credit. Consequently, taxpayers subject to maximum tax rates below 31 percent would receive imputation credits on dividends received that may exceed the shareholder level tax that would otherwise apply to dividends received. Unlike the dividend exclusion or CBIT prototypes, no additional mechanism (such as addition of a credit) is required to adjust the tax burden to the shareholder's rate because the franking process provides the shareholder with the data necessary to compute shareholder level tax (the grossed-up income and credit amounts). The prototype allows these taxpayers to use excess imputation credits to offset tax that would otherwise apply to unfranked dividends or other sources of income. This feature of the imputation credit system produces an additional revenue loss in comparison to the dividend exclusion prototype. Taxpayers who could not fully use such credits against other income could not claim a refund of the excess credits.³³

11.F ANTI-ABUSE RULES

Adopting an imputation credit system in which imputation credits are not refundable to tax-exempt and foreign shareholders may create

incentives for taxpayers to "stream" fully franked dividends to taxable shareholders and unfranked dividends to tax-exempt shareholders.³⁴ Similar incentives arise under the dividend exclusion prototype, in which corporations would prefer to pay excludable dividends to taxable shareholders and taxable dividends to tax-exempt shareholders. Section 2.B discusses the anti-abuse rules we consider appropriate to limit streaming in the dividend exclusion prototype, and we would adopt similar rules in the imputation credit prototype. Thus, for example, a holding period requirement would have to be met for a taxpayer to claim an imputation credit.

In general, opportunities for streaming would be reduced if the imputation credit prototype required corporations to pay fully franked dividends until their SCA balance were exhausted. In that case, the imputation credit system would be substantially similar to the dividend exclusion system, which requires corporations to pay excludable dividends to the extent of their SCA balances.³⁵

Application of this rule in an imputation credit context, however, could interfere with corporate dividend practices by making the franking level (and hence shareholder tax consequences) of dividend distributions dependent on taxable income. To permit corporations to smooth the pattern of dividends, including the pattern of associated credits, the prototype permits corporations to pay partially franked dividends. Using this flexibility, a corporation could reserve a portion of its SCA balance to pay future franked dividends.

Because the imputation credit prototype permits corporations to pay partially franked or unfranked dividends even when they have an SCA balance sufficient to frank the dividend fully, two additional anti-abuse rules would be required. First, to prevent excessive franking of dividends, the prototype limits the amount of credit that can be attached to a dividend. The imputation credits attached to any dividend should not exceed the maximum creditable tax on the pre-tax earnings that generated the dividend. See Section 11.B.

Second, the prototype requires corporations to frank all dividends paid during a year to the same extent. This rule prevents corporations from paying unfranked dividends on one class of stock held by taxable shareholders and unfranked dividends on another class of stock held by tax-exempt shareholders. This rule is essentially the same as that adopted by New Zealand.³⁶ This latter rule, while necessary to avoid distortion of corporate dividend payment practices, could give rise to significant complications for a corporation with multiple classes of dividend paying stock.

11.G STRUCTURAL ISSUES

Corporate Acquisitions

The imputation credit prototype retains the basic rules of current law governing the treatment of taxable and tax-free corporate asset and stock acquisitions. Adopting the imputation credit prototype would permit taxable asset acquisitions to be made with only a single level of tax. Corporate tax paid on gain recognized on the sale of assets would be added to the SCA and would create imputation credits to offset shareholder tax when the corporation liquidates and distributes the proceeds from the sale. Stock acquisitions may face a higher tax burden than asset acquisitions under distribution-related integration if capital gains on corporate stock that are attributable to retained earnings are taxed in full at shareholder rates. See Section 8.A. This problem could be mitigated by a dividend reinvestment option. See Chapter 9.

Nothing in the movement to distribution-related integration would require a fundamental change in the basic pattern of taxing qualifying corporate reorganizations. Current law treats a qualifying corporate reorganization as tax-free at the corporate level (with the target's tax attributes, including its asset basis, carrying over to the acquiror) and at the shareholder level. The policy underlying the reorganization provisions is that imposition of tax is inappropriate where a corporate reorganization merely effects a readjustment of shareholders' continuing interests in corporate property under modified corporate forms. This

policy applies equally under distribution-relation integration, because it reflects a judgment about when income should be recognized under a realization-based tax system that does not require corporate assets or stock to be marked to market, not a judgment about whether two levels of tax should be imposed on recognized corporate income.³⁷

Rules would be needed to divide a corporation's SCA when it engages in a divisive reorganization. Rules are needed to discourage the use of divisive reorganizations to isolate amounts in the SCA in one corporation for the benefit of one group of shareholders.³⁸ Current law rules generally provide that earnings and profits of the distributing corporation in a divisive reorganization that qualifies as a D reorganization under IRC § 368(a)(1)(D) are divided between the distributing corporation and the controlled corporation based on the relative fair market value of their assets. A similar rule could be adopted to govern the allocation of SCA balances in divisive reorganizations.

For the reasons set forth in Chapter 2, we do not urge any rules limiting the use of SCA balances following an ownership change. See "Anti-abuse Rules" in Section 2.B.

Earnings and Profits

The imputation credit prototype, like the dividend exclusion prototype, retains the current earnings and profits rules for determining when a distribution is treated as a dividend rather than a return of capital. See Section 2.F.

11.H EXTENDING THE IMPUTATION CREDIT PROTOTYPE TO DEBT

Adopting any of the methods of integrating the corporate and individual income taxes discussed in this Report would narrow significantly the differences in taxation of debt and equity. Under integration, only one level of tax generally would be imposed on corporate earnings distributed as dividends. Retaining the interest deduction also

ensures that no more than one level of tax is collected on corporate earnings distributed as interest. Accordingly, the introduction of integration, without any change in the rules for taxing debt, would create greater parity in the taxation of debt and equity.

Because the dividend exclusion and imputation credit prototypes are designed to retain the existing level of corporate taxes on equity capital supplied by foreigners and tax-exempt entities, however, some disparities will remain in the treatment of debt and equity capital supplied by those investors. Retaining the interest deduction in an integrated system would permit earnings that are used to pay interest to tax-exempt and certain foreign bondholders to continue to escape U.S. tax entirely.

Thus, for tax-exempt and foreign investors at least, the dividend exclusion and imputation credit prototypes generally maintain current law's bias in favor of debt financing. Eliminating this bias is a principal argument for CBIT, which represents a natural extension of the dividend exclusion prototype to debt and imposes tax once at the entity level. Equating the treatment of debt and equity in an imputation credit prototype would require a different approach—a bondholder imputation credit system.

Under a bondholder credit system with no corporate level deduction for interest, the mechanics would generally follow the rules applicable to dividends. Corporate tax paid on earnings used to pay interest or dividends would be passed through to bondholders and shareholders as imputation credits. Bondholders and shareholders would include in income the amount of the cash interest or dividend payments plus the imputation credits and could use the credits to offset tax on interest income.³⁹ Tax-exempt and foreign shareholders would not be entitled to claim refunds of imputation credits, and taxable shareholders could use excess credits to offset tax on other income but not to claim refunds.⁴⁰

A bondholder credit system differs in certain ways from CBIT, which equates the treatment of

debt and equity at the business, rather than at the individual, level. An imputation credit system would tend to impose taxation on the supplier of business financial capital rather than on the entity. The two approaches are similar when the business and its suppliers of capital would be taxed at the same rates but will diverge if the tax rate of the supplier of capital is different from the CBIT rate.⁴¹ Thus, for example, if both borrower and lender are taxable, but the lender's rate is less than the borrower's rate, CBIT will tax the interest income at the CBIT rate, while the bondholder credit system will generally tax the income at the lender's rate.⁴²

Although the bondholder credit system would generally mirror the imputation credit prototype detailed in this chapter, addition of a bondholder credit may require reexamination of the treatment of foreign investors. The issues would be similar to those posed in moving from the dividend exclusion prototype to CBIT. Retaining current law would require collecting two levels of tax on dividends and zero or one level of tax on interest. Such treatment would, however, violate the equality between debt and equity that is the goal of adopting a bondholder credit system. Accordingly, to maintain parity between debt and equity, imputation credits should not be refundable to foreign investors, but the 30 percent withholding tax now applicable to dividends and nonportfolio interest (and the branch profits tax) should be repealed.⁴³

11.1 DIVIDEND REINVESTMENT PLANS (DRIPs)

Chapter 9 discusses how a corporation might use an elective DRIP in the dividend exclusion and CBIT prototypes to allow shareholders to increase share basis to reflect earnings that have been taxed at the corporate level. A DRIP minimizes the extent to which taxing capital gains on

sales of corporate stock imposes a second level of tax on such earnings. See Chapter 8.

An elective DRIP could be made a part of an imputation credit prototype as well. A corporation would be permitted to declare deemed dividends up to the amount that can be fully franked by the balance in its SCA.⁴⁴ Shareholders would include in income the amount of the deemed dividend plus the associated imputation credit and could use the credit to offset tax due.⁴⁵ Share basis would increase by the amount of the deemed dividend.⁴⁶

Permitting a DRIP in the imputation credit prototype requires one additional rule to limit streaming of credits. As discussed in Section 11.F, the prototype limits streaming through cash dividends by requiring each corporation to frank all cash dividends paid during a year in the same proportion (the consistency rule).⁴⁷ The consistency rule is necessary because the imputation credit prototype, unlike the dividend exclusion and CBIT prototypes, permits corporations to determine the extent to which dividends (and interest payments, if a bondholder credit were adopted) are franked.

Absent additional restrictions, a corporation could use a DRIP to stream by paying unfranked cash dividends on classes of stock held by tax-exempt shareholders and fully franked deemed dividends on classes of stock held by taxable shareholders. To limit this practice, the prototype permits corporations to use an elective DRIP only if all cash dividends paid during some defined period before and after the deemed dividend are fully franked. This rule effectively extends the consistency rule to deemed dividends and limits the benefits of a DRIP to corporations that pay insufficient cash dividends to carry out its SCA balance—not those that underfrank cash dividends and distribute the remainder of the SCA through the DRIP.⁴⁸

CHAPTER 12: OTHER PROPOSALS TO REDUCE THE BIAS AGAINST CORPORATE EQUITY

12.A DIVIDEND DEDUCTION

We have not developed a dividend deduction prototype in this Report. However, the 1984 Department of the Treasury Report on tax reform recommended a 50 percent dividends paid deduction and the President's 1985 tax proposals included a 10 percent deduction.¹ A dividend deduction system produces results contrary to our general recommendations that integration not be the occasion for eliminating the corporate level tax imposed under current law on distributions to tax-exempt and foreign shareholders.² We view these general recommendations as important in ensuring that corporate income distributed to such shareholders continues to bear tax similar to that under current law. In addition, a dividend deduction proposal would be substantially more expensive than either a dividend exclusion or imputation credit system.³

The primary arguments for a dividend deduction approach are that it results in equivalent treatment for debt and equity and that it taxes distributions at the shareholder rate. The first claim is not strictly accurate to the extent that interest is deductible as it accrues while dividends are deductible only when paid.⁴ The second claim is correct but will exacerbate the bias toward distribution of earnings inherent in any distribution-based system, particularly when, as under current law, the corporate rate exceeds individual rates.

If policymakers were to select a dividend deduction system, it would be important to incorporate a mechanism analogous to the EDA of the dividend exclusion prototype to limit the amount of deductible dividends to the amount on which U.S. corporate tax has been paid.⁵ Absent such a restriction, a dividend deduction system would allow a deduction for dividends paid out of preference income and foreign source income sheltered

from U.S. tax by foreign tax credits. Allowing such deductions would not simply eliminate corporate taxes paid on that income (because, by definition no U.S. corporate taxes have been paid) but instead would permit the corporation to shelter earnings on which U.S. corporate tax would otherwise be imposed.⁶

It is not altogether clear how a dividend deduction system would treat foreign shareholders. Presumably, the deduction would be allowed for dividends paid to foreign shareholders, and the 30 percent withholding tax on dividends would be retained, although treaty provisions reduce the withholding tax to as low as 5 percent. Similarly, the branch profits tax on domestic branches of foreign corporations presumably would be retained with a modification to provide parity with the dividend deduction for domestic corporations.

Since dividends would be taxable only to the recipient in a dividend deduction proposal, there would be no dividends received deduction for corporations.⁷ A DRIP probably would not be appropriate in a dividend deduction approach because it could result in allocation of taxable income to shareholders without receipt of cash sufficient to satisfy the shareholder's resulting tax liability.⁸

While we have not developed a dividend deduction prototype in this Report, we review below two proposals for dividend deduction systems, one made in 1991 by the Capital Taxes Group of the Institute for Fiscal Studies in the United Kingdom and one made in 1989 by the Reporter for the American Law Institute's Federal Income Tax Project (Subchapter C). These proposals are not presented here as fully as other integration prototypes but are included as related proposals intended to improve the neutrality of the tax treatment of debt and equity finance for corporations.

12.B INSTITUTE FOR FISCAL STUDIES PROPOSAL

The Capital Taxes Group of the British Institute for Fiscal Studies (IFS) proposed the introduction of an "Allowance for Corporate Equity" (AFCE).⁹ Under this approach, a corporation would be allowed to deduct in its calculation of taxable income an allowance based on shareholders' equity employed in the business. The intent of this proposal is to enhance neutrality by treating equity finance like debt finance.¹⁰

The deductible AFCE allowance would be equal to the product of "shareholders' funds" (generally the corporation's total equity capital)¹¹ and an "appropriate nominal interest rate." The interest rate used for calculating the AFCE would be set by the government for all corporations and, in general, should reflect a normal market rate of return. The IFS recommends that the rate be established each month equal to the rate for a medium-term government security. Because firms with risky opportunities or facing informational imperfections in capital markets would have costs of funds significantly higher than the allowable rate for deduction, mature, less risky firms would receive a greater relative benefit from the AFCE system.

The AFCE system prevents double counting of intercorporate investments by reducing shareholders' funds by the amount of funds invested in other firms. It also prevents allowance of both an interest deduction and an AFCE allowance with respect to intercorporate equity investments funded by debt by imputing a negative AFCE adjustment to the borrower.¹²

The AFCE proposal is designed to operate in a classical corporate tax system to reduce the tax bias against equity finance. The IFS proposal is not a true integration proposal. Corporate equity income in excess of the AFCE allowance would remain subject to a second level of tax when such income is distributed or when shareholders are taxed on capital gains attributable to such income. As a consequence, the IFS proposal would not

eliminate the bias against the corporate form and the incentive to retain rather than distribute corporate equity income in excess of the AFCE allowance.

12.C AMERICAN LAW INSTITUTE REPORTER'S STUDY DRAFT

In 1989, the Reporter for the American Law Institute (ALI) Federal Income Tax Project (Subchapter C) outlined a set of four proposals for reform of the corporate tax.¹³ The Reporter's Study Draft proposals are not integration proposals. They are intended to revise the classical corporate tax system to reduce the tax bias against new equity finance and to eliminate the tax bias against dividend distributions relative to non-dividend distributions, e.g., share repurchases. The latter goal would be accomplished by increasing tax rates applied to nondividend distributions rather than by decreasing tax rates applied to dividend distributions.

The Reporter's Study Draft advances two proposals to reduce the tax bias against new equity finance. First, corporations would receive a deduction for dividends paid on new equity capital (Qualified Contributed Capital or QCC).¹⁴ The deduction would be equal to a prescribed interest rate multiplied by net contributed capital less extraordinary dividends and nondividend distributions. The prescribed interest rate for deductions would be limited to the long-term borrowing rate specified under IRC § 1274, plus 2 percent.

Second, the Reporter's Study Draft would limit corporate interest deductions to the net amount of debt capital raised. In particular, no deduction would be allowed for interest on "converted equity," including debt incurred to finance an extraordinary dividend or stock acquisition, share repurchase, or any other nondividend distribution. The deduction allowed for interest on any other type of debt also would be limited to the long-term borrowing rate specified under IRC § 1274 plus 2 percent.

Taken together, these two proposals are designed to reduce the tax bias against new equity finance.¹⁵

The concern over the tax bias against dividend distributions relative to nondividend distributions motivates the other two proposals in the Reporter's Study Draft. First, the ALI Reporter proposes a "minimum tax on distributions" (MTD) equivalent to 28 percent of the gross amount of any extraordinary dividend or nondividend distribution, including distributions in redemption and liquidation and any purchase of shares. The tax would be collected by the distributing corporation, and would be creditable against a shareholder's tax on the distribution (but not against other income).¹⁶

Second, in the case of direct investments in a corporation by another corporation, the Reporter's Study Draft would treat a purchase of shares in a corporation by another corporation that owns at least 20 percent of the shares as a nondividend distribution subject to the MTD and other applicable rules. However, intercorporate dividends

would not be subject to tax, and basis adjustments similar to those provided under the current consolidated return regulations would be made. For portfolio investments, on the other hand, the investor corporation would be taxed in full like any other investor and no dividends received deduction would be allowed.¹⁷

The Reporter's Study Draft proposals would reduce the tax bias against new equity finance, while maintaining the tax bias against dividend payments from accumulated equity. The economic assumptions underpinning the ALI proposals seem to be those of the "new view" of dividend taxation, in which the taxes on dividends from accumulated equity are capitalized into share values and do not affect dividend decisions. As a result, extending dividend relief to accumulated equity is perceived as conferring a windfall gain to "old" equity, since under the assumptions of the new view, dividend distributions are unavoidable. As discussed in Chapter 13, we accept the "traditional view," in which reducing the tax burden on dividends generally increases dividend payouts and economic efficiency.¹⁸

PART V: ECONOMIC ANALYSIS OF INTEGRATION

CHAPTER 13: ECONOMIC EFFECTS OF INTEGRATION

13.A INTRODUCTION AND SUMMARY

This chapter presents quantitative estimates of the impact of the integration prototypes developed in the Report on the allocation of resources, corporate financial policy, portfolio allocation, and Federal tax revenues.

We examine the effects of each integration prototype using four alternative models of the economy and two assumptions about how integration would be financed. Results differ from model to model, as well as by financing assumption, but, in general, the integration prototypes reduce the tax penalty on corporate investment and encourage capital and other resources to flow into the corporate sector. Depending on the prototype, model, and financing assumption, this capital expansion ranges from a 2 to 8 percentage point increase in the capital stock used in the corporate sector. In dollar terms, this ranges approximately from \$125 billion to \$500 billion in additional corporate capital. CBIT generally produces the largest expansion of corporate capital, but in several of the calculations, the more traditional integration prototypes yield a similar expansion.

In addition, each of the integration prototypes generally encourages corporations to use less debt. Estimated debt to asset ratios decrease by 1 to 7 percentage points, depending upon the model, financing assumption, and prototype. CBIT is the best prototype for encouraging firms to reduce their relative use of debt.

The integration prototypes encourage corporations to increase the portion of earnings distributed as dividends. Both CBIT and the shareholder allocation prototype promote efficient corporate dividend policy by almost entirely eliminating taxes as a consideration. In contrast, the distribution-related prototypes encourage firms to pay out more of their earnings as dividends than may be

optimal. Depending on the model, financing assumption, and prototype, nominal dividend payout ratios would increase by 2 to 6 percentage points.

By shifting resources into the corporate sector, reducing corporate borrowing, and encouraging dividends, the integration prototypes generate changes in economic welfare. Overall, the prototypes improve economic welfare in all calculations, and the improvement ranges from an amount equivalent to 0.07 percent of annual consumption (total consumer spending on goods and services) to an amount equivalent to 0.73 percent of consumption, or from approximately \$2.5 billion to \$25 billion per year. CBIT or shareholder allocation prototypes generally contribute the greatest increases in welfare, but the distribution-related prototypes also produce significant economic welfare gains. Much of the variation in results reflects differences in the models used to analyze the prototypes or differences in financing assumptions, rather than differences among prototypes. Indeed, one striking feature of the calculations is that within each model, and for a given financing assumption, structurally different prototypes often have similar overall effects on economic well-being. These results accord with the general economic equivalence of basic integration prototypes in the absence of distortions induced by rate differentials demonstrated in Appendix C.

The results summarized above are generated from models of the economy that abstract from international capital flows. While internationally mobile capital can cause tax law changes to have different effects from those predicted by closed-economy models, there is no consensus among economists regarding the sensitivity of international flows of debt and equity capital to changes in net returns, especially for a country such as the United States with a very large domestic economy. Consequently, the Report does not

present a detailed quantitative analysis of integration in an international context, although the effects of the integration prototypes on international capital flows and portfolios are discussed in Section 13.F. The distribution-related and shareholder allocation prototypes are estimated to have only a small effect on the net capital flows into the United States; the effects of CBIT are more uncertain. Each integration prototype, however, may change substantially the composition of international portfolios, even if net flows of capital are not greatly affected.

Section 13.B analyzes the principal economic issues surrounding the debate over the benefits of corporate tax integration, building on the discussion in Chapter 1. Section 13.C describes important methodological issues in modeling effects of integration on economic efficiency. Section 13.E evaluates effects of integration on the cost of capital and corporate financial decisions. A more complete analysis of economic effects of integration using a set of computable general equilibrium models is provided in Section 13.F. Issues relating to distributional implications of integration are discussed in Section 13.G. Finally, estimates of integration prototype's effects on Federal tax revenue are presented in Section 13.H.

13.B CORPORATE TAX DISTORTIONS: ECONOMIC ISSUES

Bias Against Investment in Corporate Form

The waste of economic resources from the tax-induced misallocation of capital between the noncorporate and corporate sectors was the original focus of economists' criticism of the classical corporate income tax system. Beginning with Harberger (1962), economists have argued that a classical corporate tax system increases the share of capital allocated to the noncorporate sector, thereby raising pre-tax required rates of return in the corporate sector.

Harberger's model divides the economy into two sectors, a corporate sector and a noncorporate

sector. The Harberger model has four central assumptions. First, in both sectors, output is produced by combining capital and labor. Second, the total amounts of capital and labor supplied in the economy are fixed. Third, although the total amounts of capital and labor supplied are fixed, the amounts supplied to each sector can vary. Fourth, suppliers of capital and labor seek to maximize their incomes.

Taken together, the third and fourth assumptions above have an important implication: In the long run, the net return on the last dollar of capital in each sector must be the same, since suppliers of capital invest their capital where its net return is highest. As a result, capital will flow out of the sector with a low net return and into the sector with the high return. This flow continues until net rates of return are equalized between the two sectors.

Over the years, more sophisticated versions of Harberger's model have been developed to examine more carefully the costs of the economic distortions related to the corporate income tax. One important step was the development of more complex models with many sectors of the economy.¹ Most recently, researchers have noted that economic distortions from the corporate income tax are greater than earlier estimates to the extent that the tax distorts the relative importance of corporate and noncorporate producers within an industry.² Costs associated with this additional margin of distortion arise when corporate and noncorporate producers within an industry have different advantages, for example, greater ability to exploit scale economies by corporations or greater entrepreneurial skill in noncorporate organizations.³

Current U.S. tax law distorts the allocation of investment away from the economy's corporate sector and into the noncorporate sector whenever investors require equity to finance investment. The corporate cost of equity capital generally exceeds the noncorporate cost of capital because of the two-level tax on corporate equity income. Consequently, corporate investment projects require a higher pretax rate of return than projects

of noncorporate business enterprises. Therefore, some corporations fail to undertake investments that would be profitable if the tax burden on corporate and noncorporate investments were the same. Moreover, for some business enterprises, the added corporate taxes exceed the benefits of incorporation, and such businesses forego the advantages of incorporation and choose instead to operate as partnerships or sole proprietorships.⁴

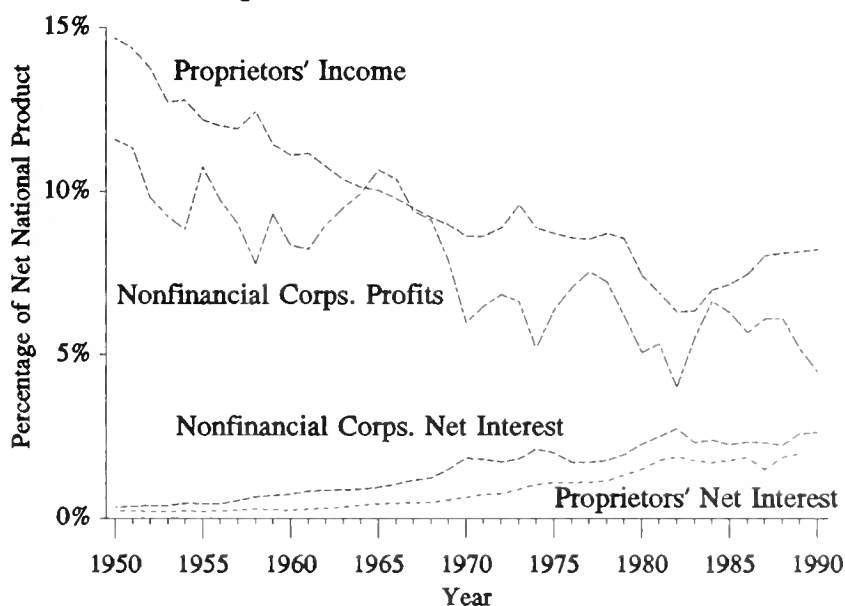
While the classical system may encourage corporations to operate in noncorporate form, aggregate data to date do not document a long-term trend of shifting economic activity away from the corporate sector. Figure 13.1 shows that incomes of owners of noncorporate businesses have fallen as consistently as a share of net national product as have corporate profits. By contrast, the total income (profits, interest, rents, and wages) generated in the corporate sector has increased slightly, from an average of 50 percent of net national product in the 1950s to an average of 53 percent in the 1980s (Figure 13.2). Other long-term comparisons of corporate activity to the general economy also fail to present any general pattern of disincorporation.⁵ However, data for the past few years (some of it preliminary) does suggest reduction in the size of the corporate sector relative to the overall economy and to the noncorporate sector.⁶

Subchapter S corporations have accounted for an increased share of corporate profits and have contributed to the declining role of the corporate income tax, particularly since 1986. The Subchapter S Revision Act of 1982 increased the attractiveness of S corporations and led to an expansion of S corporation activity. However, in the 4 years following the 1982 amendments, S corporation

net income accounted for only 3 percent of total corporate net income, up only slightly from 2.1 percent in the previous decade. Data for 1987 and 1988, in contrast, indicate a substantial increase in S corporation net income to 8.6 percent of all corporate income in 1987 and 9.5 percent in 1988.⁷ This increased S corporation activity seems to be a response to the 1986 Act's inversion of the top individual and corporate tax rates and repeal of the capital gains rate preference.⁸

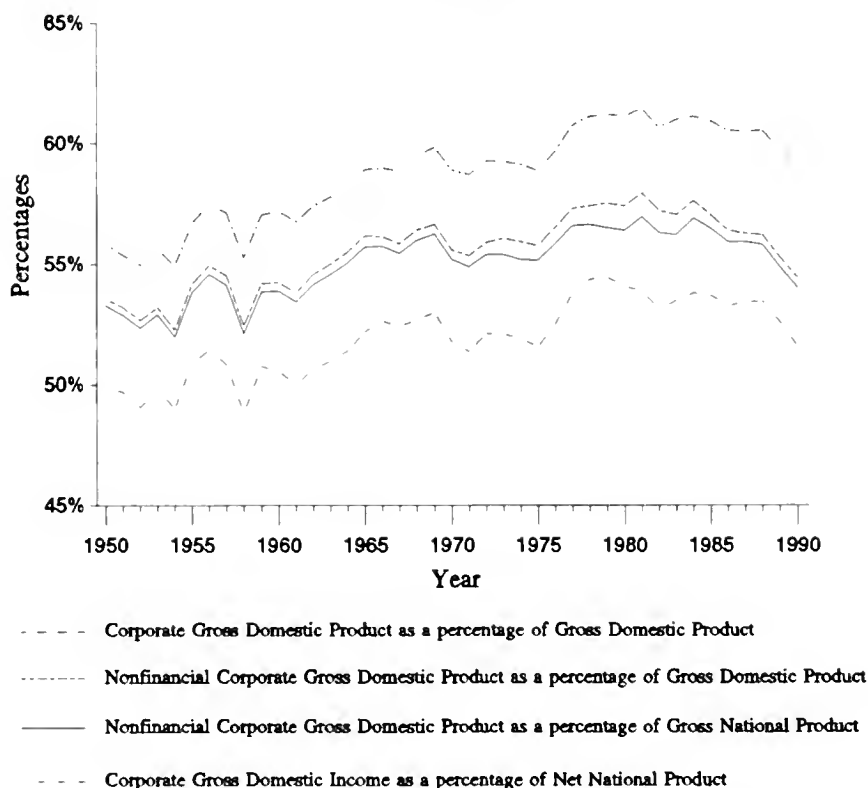
A measure of the bias against equity investment in a corporation that pays dividends is the extent to which the combination of the corporate tax rate on earnings and the individual tax rate on dividends exceeds the individual tax rate on business income. In the case of equity investments in a corporation, retained earnings are taxed ultimately at the shareholder level as capital gains. Accordingly, the measure of the bias against equity investment in the corporate sector in that case is the extent to which the combination of the corporate tax rate and the individual capital gains rate exceeds the effective individual tax rate on business income.

Figure 13.1
Profits of Nonfinancial Corporations,
Proprietors' Income, and Net Interest as a
Percentage of Net National Product, 1950-1990



Source: National Income and Product Accounts, Bureau of Economic Analysis, U.S. Department of Commerce.

Figure 13.2
Measures of Corporate Activity in the Economy
1950-1990



Source: National Income and Product Accounts, Bureau of Economic Analysis, U.S. Department of Commerce.

Assuming a positive effective corporate tax rate, the classical system always creates a bias against investing in equity in a corporation that distributes all current earnings relative to a non-corporate investment. If the corporate tax rate were zero, corporate earnings would be taxed only at the shareholder rate, and therefore the bias against corporate equity would be eliminated.⁹ That the corporate rate currently exceeds the individual rate does not create a new bias; it merely exacerbates a bias that is present whenever all current earnings are distributed and the corporate rate exceeds zero, regardless of its relationship to the individual rate.

For equity investments in a corporation that retains earnings, differences among tax rates may reduce, eliminate, or even reverse the bias against

corporate investments. The overall effect depends upon whether the combination of the corporate tax rate and the effective capital gains rate is greater than, equal to, or less than the individual tax rate on business income. Even when realized capital gains are taxed at the same rate as ordinary income, the effective capital gains rate is generally lower than the statutory rate, because the capital gains tax can be deferred until gain is realized through a sale or exchange.¹⁰ In an extreme case, if the combination of the corporate tax rate and capital gains rate is lower than the individual rate, the classical system may actually create a bias in favor of investing in corporate equity.¹¹ Currently, however, even a full exclusion from tax of capital gains on corporate shares would

generally not eliminate the tax system's bias against equity investment in the corporate sector because the corporate rate exceeds the top individual rate.

Two other features of the tax system currently reduce the tax bias in favor of noncorporate investments. First, the benefits of accelerated depreciation are somewhat greater for corporations, because corporate tax rates tend to exceed individual tax rates on shareholders and on non-corporate businesses. Second, to the extent that corporations finance investments through debt, the relative tax advantage afforded noncorporate firms is diminished. Considering only tax factors, corporate and noncorporate entities face the same cost of debt financed capital. Thus, to the extent corporations finance new investment with debt,

the difference in tax burden for total investment, both debt and equity financed, will be reduced.

Bias Against Equity Finance

The Tax Bias Against Equity

The source of the bias against equity financing is similar to the source of bias against corporate investment described in the preceding section.¹² An investment in corporate equity is subject to tax once at the corporate rate and again at either the individual rate or the effective rate on capital gains. In contrast, interest earned on debt, like income from an unincorporated business, is subject to tax only at the investor's rate. Consequently, equity funded projects generally require a higher pretax rate of return than projects financed with debt.¹³

Nontax Benefits and Costs of Debt Finance

Chapter 1 discussed important nontax and tax considerations in corporate borrowing decisions. Central to the argument that the tax bias against equity finance distorts corporate financing decisions is the existence of nontax costs and benefits associated with corporate debt financing. If nontax costs of debt are significant, losses in economic efficiency can accompany the greater debt levels resulting from the tax bias against equity finance.

As corporate borrowing remained high during the 1980s, many nontax arguments for high debt financing appeared. Analysts most sanguine about the rise in debt financing typically maintain that debt is desirable because it gives suppliers of capital an indirect means to monitor the activities of managers. Their reasoning is that the need for supervision results from the separation between ownership and management that is characteristic of the traditional corporate structure. A conflict between ownership and management can emerge if it is difficult for suppliers of capital to observe and evaluate the activities of entrenched managers. In this kind of environment, management's self interest may not always coincide with efficiently operating the business enterprise—with maximizing value.¹⁴

In practice, increased debt financing may be an ineffective way to improve managerial incentives. It works best when most of the variation in an enterprise's cash flow is specific to the firm. It works poorly when most of the variation is common across business enterprises (as with industry-wide or business cycle fluctuations).¹⁵ Thus, even when there are incentive benefits from debt, the most efficient financial arrangement will involve both debt and equity, with equity serving as a cushion against economywide fluctuations in profitability.

Many academic and business economists have stressed the nontax costs of a declining reliance on equity finance. One concern is that the costs of financial distress and bankruptcies could be greater than in the past, more businesses with high debt financing. Firm level data illustrate the reason for this concern. Warshawsky has calculated weighted average, median, and ninetieth percentile values of (market-value) debt to asset ratios for firms in the COMPUSTAT Industrial and Full Coverage samples, over the period from 1969 to 1988.¹⁶ As with the aggregate data discussed in Chapter 1, all statistics for the subsamples indicate a rising debt to asset ratio, though much of the increase occurred before 1980. This measure can, of course, be distorted by large swings in the value of equities (as, for example, in 1973 and 1974). The debt to asset ratio has, however, climbed since 1983 in spite of significant increases in the value of equity.¹⁷ Warshawsky also calculated the ratio of interest payments to cash flow for the individual business enterprises. Over the 1969-1988 period, the mean and median value of the ratio virtually doubled; the value for the ninetieth percentile firms more than tripled. Much of the change occurred during the 1980s. In addition, the average quality of publicly issued debt (as measured by bond ratings) declined steadily in the 1980s.

To put the macroeconomic concern in sharper perspective, Bernanke and Campbell considered the experiment of imposing a reduction in cash flows similar to those experienced during the 1974-1975 recession on a sample of firms with financial conditions corresponding to 1986 data.

The sample was drawn from Standard and Poor's COMPUSTAT file, and therefore consisted primarily of large firms. The simulations implied that a downturn like 1974-1975 would force more than 10 percent of the sampled firms into bankruptcy. Updates for later years in Bermanke, Campbell, and Whited and in Warshawsky yielded similar conclusions.¹⁸

What role have tax distortions played in tilting the balance between benefits and costs of different degrees of debt financing?¹⁹ Under a tax system that treats equity finance unfavorably, firms are induced to have less equity outstanding, thereby lowering their "equity cushion" against business cycle risk, and raising the chance of incurring costs of financial distress during a future downturn.²⁰ The tax distortion makes this decision rational for individual corporations but socially inefficient.

Bias Against Corporate Dividend Distributions

The current system of corporate income taxation also may distort a corporation's choice between distributing or retaining earnings and, if amounts are distributed, whether they are paid in the form of a nondividend distribution, such as a share repurchase. There are two alternative explanations in contemporary corporate finance—commonly known as the "new view" and the "traditional view"—of why corporations continue to pay dividends despite the high relative taxation of dividends compared with capital gains generated by reinvested earnings or share repurchases.²¹ The traditional view asserts that dividends offer special nontax benefits to shareholders that offset their tax disadvantage. For example, dividends may provide signals to investors about a corporation's relative financial strength or future prospects.²² Alternatively, high dividend payouts may reduce managerial discretion over internal funds (see the analogous discussion above of the incentive benefits of corporate debt financing). According to the traditional view, corporations set dividend payments so that, for the last dollar of dividends paid, the extra benefit of dividends equals their extra tax cost. Thus, the amount of

dividends paid out is expected to decrease as the tax burden on dividends relative to capital gains increases. Dividend taxes also raise the cost of capital (and thereby lower investment) to the extent that corporations pay out earnings as dividends. Thus, the traditional view argues that raising dividend taxes will lower the dividend payout ratio and incentives for real investment. Moreover, under the traditional view, the need to maintain dividend payments constrains the use of retained earnings as corporations' marginal source of equity financing for new investments; instead, corporations frequently must turn to new equity issues.

Under the new view, dividend payments offer no nontax benefits to shareholders relative to retentions.²³ The hypothesis further assumes that corporations have no alternative to dividends for distributing funds to shareholders. Given these assumptions, investor level taxes on dividends reduce the value of the firm, but do not affect the firm's dividend or investment policies. Since dividend taxes must eventually be paid, they are capitalized in share values, reducing share prices enough to compensate for the tax burden. In effect, a dividend tax acts as a lump-sum tax on equity existing when the tax is imposed, and on new equity contributions. Therefore, corporations prefer not to issue new shares to finance additional investment opportunities. Retained earnings and debt are preferred sources of funds. Dividends are determined as a residual after the firm undertakes all profitable investments. Consequently, a permanent change in the tax rate on dividends will not change a firm's investment policies or payout decisions.²⁴ Although the dividend tax does not affect investment incentives,²⁵ the capital gains tax affects investment incentives because retentions increase the value of a firm's shares and such appreciation is taxable as a capital gain.²⁶

The tax policy implications of the traditional and new views with respect to the taxation of corporate income are quite different. The new view assumes that the investor level taxes on distributions are capitalized into share values, with the consequence that (1) existing shares are

valued below the market value of corporate assets, so eliminating or reducing taxes on existing corporate assets would produce gains to current shareholders and (2) moving to a system that is more neutral in taxing retentions and distributions would not encourage corporations to pay more dividends.²⁷

In contrast, under the traditional view, where new funds rather than retained earnings provide the source of finance for additional investments by the corporation (1) shares should not sell at a price below corporate asset values despite the existence of the existing two level corporate tax system, so a major shift in the relative treatment of dividends and retentions should not create significant share price increases for current shareholders and (2) making the tax system more neutral between retentions and distributions would increase corporate dividend distributions and economic efficiency.²⁸

As discussed above, these different views have different theoretical implications about whether corporations will vary payout behavior in response to changes in the tax rate on dividends relative to the tax rate on capital gains. The traditional view regards differences in the tax rate on dividends relative to the tax rate on capital gains as a determinant of payout decisions; the new view does not. One way to resolve the controversy would be to determine how dividend payout ratios vary over time with the tax rate. Poterba has calculated that the average dividend payout ratio (the ratio of dividends to inflation-adjusted after-tax profits) for U.S. corporations was 0.46 in the 1950s, 0.40 in the 1960s, and 0.45 in the 1970s, but increased to 0.61 in the period from 1980 to 1986 during which the taxation of dividends was reduced relative to the taxation of capital gains.²⁹ Although this pattern tends to support the traditional view, it does not provide convincing evidence, because nontax factors also affect a corporation's dividend policy. Statistical analysis of the determinants of dividend payment policy is required to determine the independent effect of dividend taxes on corporate

payout behavior, and several studies have undertaken this task.³⁰ The studies use different data sources and methodologies, and estimates of the elasticity of the payout rate with respect to dividend taxation. Nevertheless, all of the studies conclude that dividend payout ratios do respond to changes in the tax rate on dividends.³¹ Thus, this type of empirical evidence is consistent with the traditional view.³²

Corporations also distribute significant amounts of earnings to shareholders by repurchasing shares. This is inconsistent with the assumption underlying corporate financial policy under the new view. The tax consequences of a nondividend distribution, such as through a share repurchase, are significant: The shareholder is able to recover at least a portion of the cost of the shares free of tax, and gain on the sale is taxed as capital gain, which may be taxed at a rate lower than the ordinary income tax rate on dividends.

Share repurchases have increased substantially in recent years. Shoven presents data suggesting that aggregate share repurchases increased from \$1.2 billion in 1970 to \$27.3 billion in 1985 (5.4 percent and 32.7 percent of dividends, respectively). Data presented by Poterba show a similar pattern. Share repurchases increased from \$1.8 billion in 1976 to \$43 billion in 1985 (5.0 percent of dividends and 50 percent of dividends, respectively).³³ Department of the Treasury calculations reveal that share repurchases rose from \$5.5 billion in 1980 (10 percent of dividends) to \$48.8 billion in 1985 (57 percent of dividends), peaking at \$65.8 billion in 1989 (47 percent of dividends). In 1990, corporate share repurchases totaled \$47.9 billion (34 percent of dividends).³⁴

To summarize, the principal distinction between the two views of corporate dividend policy for our purposes relates to their assumptions about nontax benefits of alternative corporate financial policies. The new view assumes that dividends offer no nontax value to shareholders relative to retained earnings. Underlying the traditional view is the idea that information and incentive

problems in financial markets make particular corporate financial policies valuable for nontax purposes.³⁵

The present U.S. tax system treats retained earnings more favorably than dividends. Alternatively, given the potential nontax benefits of dividend distributions, one might consider reversing this bias by imposing relatively higher taxes on retained earnings using, for example, an undistributed profits tax. However, this approach would disadvantage corporations facing high costs of external finance relative to internal finance for nontax reasons. Such financing cost differentials could arise from the transaction costs of issuing securities or from problems of asymmetric information between corporations and capital markets.³⁶

Effects on Savings and Investment

The corporate tax increases the tax burden on the returns from saving and investing. Taxes on capital income generally reduce capital formation. Because of the importance of international capital flows, which reflect the possibility of investing abroad if U.S. investment opportunities are not sufficiently attractive (or, conversely, the possibility of increased investment in the United States by foreign investors if opportunities are more attractive here), the corporate tax may have a larger effect on U.S. investment than on U.S. savings.

The magnitudes of tax-induced distortions of investment and savings decisions depend on (1) the size of the wedge between pre-tax and after-tax returns and (2) the responsiveness of savers and investors to changes in after-tax returns. The more responsive savers and investors are to changes in taxes, the larger the effect of a tax wedge of a given size.³⁷

In a closed economy, domestic saving equals domestic investment, and the average cost of capital summarizes tax incentives to save as well as to invest. International capital flows break the equivalence of domestic saving and investment, however. Consider the case of perfect international capital mobility. Domestic investment would be

governed by the pre-tax return needed to cover taxes and the worldwide opportunity cost of funds. At the same time, domestic saving depends on the after-tax return to investor, earned from investing at the world rate of return. Domestic investment would thus depend on domestic corporate level taxes, although domestic saving would depend only on domestic individual level taxes. More broadly, in the presence of international capital flows, the U.S. corporate income tax can reduce incentives to invest in the United States, even if it has a relatively small effect on saving by U.S. citizens.

13.C METHODOLOGICAL ISSUES IN ANALYZING THE ALLOCATION EFFECTS OF INTEGRATION

The Importance of Using a General Equilibrium Model

By distorting incentives, the classical corporate tax system produces an inefficient allocation of resources. The size of the inefficiency depends in part on how the households' and corporations' decisions respond to changes in the tax system. For example, the more responsive dividend distributions are to tax considerations, the greater the financial inefficiency induced by the double tax on dividends. The analysis of the economic effects of integration is complicated by behavioral effects in one market that can affect other markets. For example, if the corporate tax tends to drive capital out of the corporate sector, prices and rates of return in the noncorporate sector are affected.

Thus, to assess the economic consequences of integration, one must analyze how the various markets in the economy operate and interact with each other. Economists have responded to this challenge by constructing computer representations of the economy and using these representations to simulate how the economy would respond to various changes in the tax system. These representations of the economy are called computable general equilibrium (CGE) models.³⁸

The Advantage of Using Several Models

As with all economic models, the results generated by a CGE model depend on underlying assumptions about how the economy operates. Since there is no consensus regarding a single best set of assumptions, this Report analyzes integration proposals using four different CGE models. This procedure assures that the findings are not associated with a particular modeling strategy.³⁹

The general equilibrium models used to evaluate integration are detailed representations of the U.S. economy and its actual (and proposed) tax system. Nonetheless, all the models abstract from some important details of both the economy and the tax system. For example, none of the models captures effects from changes in the degree to which corporate preferences are passed through to shareholders. In addition, all the models focus on long-run results. Various transition issues, which might have important implications for economic behavior and for tax revenues, are not considered. This focus on the long run is correct, however, because the goal of achieving an improved long-term performance of the economy is the prime factor motivating a concern with integration. Nevertheless, short-run transition effects can be substantial.

The Importance of Replacement Taxes

Given current budgetary constraints, a complete analysis of the integration prototypes requires viewing integration as a revenue neutral tax reform, including both direct tax changes and secondary changes required to maintain the same total revenue yield for the government.

We do not recommend in this Report specific changes in the tax system to finance integration. Nonetheless, to avoid confusing the results of the simulation analysis by introducing changes in government spending on goods and services, some form of replacement taxes must be specified to hold government revenue constant after the introduction of the integration prototypes. In part because of the arbitrary nature of choosing

replacement taxes, we consider two types of replacement taxes: (1) lump-sum taxes and (2) adjustments to statutory tax rates on capital income. Both the size of each prototype's economic effects and the ranking of prototypes by their relative impact may depend on the form of replacement taxes chosen.

Lump-sum taxes are hypothetical, unavoidable taxes. That is, taxpayers cannot change their tax liability under such a tax by changing behavior. As a consequence, by definition lump-sum taxes do not distort economic decisions. Though they are commonly used in academic studies of economic efficiency, lump-sum replacement taxes have an important drawback for modeling integration prototypes. They can bias comparisons among prototypes in favor of the prototype that loses the most revenue, because the efficiency gain from replacing distorting taxes on capital income with nondistorting, lump-sum taxes increases with the amount of revenue that must be replaced. This effect is important in an analysis of integration because the prototypes have disparate revenue costs. Compared to the actual gains that might be realized from integration, the calculations based on lump-sum replacement taxes can both overstate the size of the gain realized from each revenue losing prototype and produce a misleading ranking of prototypes. However, because not all distortions are analyzed, e.g., the "lock in" of capital gains and distortions of intertemporal consumption decisions are ignored, the lump-sum calculations do not necessarily generate efficiency gains that exceed the true gains. In addition, since CBIT raises revenue, results from the lump-sum replacement may understate its true gain.

Because of the problems with lump-sum replacement taxes, calculations also are performed holding government revenue constant by proportionately increasing or reducing all tax rates on capital income. In these calculations, the tax rates applied to corporate income, noncorporate equity income, dividends, capital gains, interest, and home mortgages are increased or reduced by an amount sufficient to hold government revenue constant at its current law level. Calculations

using scaled tax rates offer an important advantage over those based on lump-sum replacement taxes: The scaled-tax-rate calculations raise replacement revenue (and distribute excess revenue) by raising (or lowering) taxes that distort economic decisions, and so reduce the bias in favor of revenue losing tax changes. Nonetheless, these calculations are not definitive. In particular, to the extent that the integration prototypes could be made revenue neutral by more efficient tax changes, the actual economic welfare gains may be larger than those obtained in our scaled tax rate calculations.

Because each of the CGE models provides only a limited picture of the economy, the ability of these models is to simulate the revenue consequences of each of the prototypes is somewhat restricted. In particular, none of the models provide an adequate treatment of the financial services industry, and indeed only the Portfolio Allocation model (described in Section 13.F) can account for shifts in the ownership of the various financial instruments issued by businesses and governments. Even this model, however, tends to adopt a mechanical approach to the arbitrage possibilities possible under the different integration prototypes; in contrast, the revenue estimating models recognize that non-tax factors limit actual shifts in asset holdings. Thus, requiring that any loss (or gain) in revenues be made up with a positive (or negative) replacement tax also reduces any disparities in the results of the different models that would otherwise arise from differences in anticipated revenues.

The analysis presented in this Report focuses on the scaled-tax-rate calculations, but results based on the lump-sum replacement mechanism also are presented.

13.D OVERVIEW OF THE INTEGRATION PROTOTYPES

The basic features of the integration prototypes that are incorporated in the CGE models are reviewed below. The actual prototypes are described in more detail in Chapters 2, 3, 4, and 11 of this Report. In particular, it should be noted

that the CGE models generally do not capture the investor level tax imposed when distributions are made from tax preference or foreign-taxed income.

Distribution-Related Integration

Under the distribution-related prototypes, corporate earnings are taxed at the corporate level, but dividends are excluded at the shareholder level (dividend exclusion system), or shareholders receive a credit for the corporate tax paid on distributed income (imputation credit system). Under these prototypes, the bias against corporate equity investment is reduced to the extent that returns are paid out as dividends; similarly, the relative bias against equity relative to debt finance is reduced to the extent earnings are distributed as dividends. Distribution-related integration, in principle, can create a tax bias for or against dividends, depending on the values of the corporate tax rate, shareholder tax rate, and accrual-equivalent capital gains tax rate. The prototypes assume that the current corporate and individual tax rates are maintained. Thus, it is likely that distribution-related integration would increase dividend distributions.

Dividend Exclusion. The dividend exclusion prototype applies the corporate tax rate of 34 percent to both distributed and retained income, but eliminates the second shareholder level tax on dividends paid from earnings taxed at the corporate level.

Imputation Credit. Relief from the corporate income tax is provided to the extent that corporate earnings are distributed as dividends. This relief takes the form of a tax credit available to shareholders. The nonrefundable tax credit is calculated at a 31 percent rate, so that it does not offset completely the corporate income tax paid on distributed earnings.

Shareholder Allocation Integration

The shareholder allocation prototype adopts a "modified conduit" approach. Under a pure conduit approach, corporations would be treated

like partnerships, so the corporate level tax would be eliminated and all income and expenses would be imputed to shareholders, who would then include the income and expenses in their own tax liability. Shareholders would adjust their basis in shares upward by the amount of net income imputed to them, and reduce their basis in shares downward by the amount of net losses imputed to them and by the amount distributed to them by the corporation.

The modified conduit approach taken in the shareholder allocation prototype differs from the pure conduit approach. For example, the prototype imputes net income to shareholders, but not net losses. In addition, the prototype retains the corporate tax at a rate of 34 percent, but credits the shareholder with the payment. This tax is creditable against shareholder tax liability at a rate of 31 percent, but it is not refundable. The shareholder allocation prototype reduces but does not eliminate the distortions of organizational form and corporate financial policy under current law.

CBIT

The CBIT prototype imposes a uniform tax rate of 31 percent on returns to both debt and equity generated by all business. Because the tax would be collected at the business entity level, interest and dividends would be untaxed to the recipient. Under CBIT, interest on U.S. Government debt would remain taxable. Home mortgage interest would remain deductible by the borrower and taxable to the lender.

Investments in corporate equity paying current dividends would not be penalized under CBIT because, as modeled, all business entities other than very small entities, regardless of form, would be subject to the same tax rate. Under CBIT, neither interest nor dividends would be deductible at the business level or taxable in the hands of the recipient. Thus, the CBIT prototype would equalize the tax burden on interest and dividends. The efficiency calculations do not take into account any compensatory tax (see Chapter 4) on distributions from preference income.⁴⁰ Hence, CBIT would replace the combined

corporate-individual tax rate on distributed earnings with a single tax levied at the CBIT rate. The same rate would apply to corporate retentions, and since, as modeled, capital gains on CBIT assets are exempt from taxation, CBIT would not distort corporate dividend policy.

13.E INTEGRATION, CORPORATE FINANCIAL POLICY, AND THE COST OF CAPITAL

Table 13.1 illustrates how successful each prototype is in reducing the three biases in current law that integration is meant to reduce: the bias against investment in corporate form, the bias against equity finance, and the bias against corporate dividend distributions. For individuals, all prototypes would reduce the tax rate on distributions of corporate equity nonpreference, U.S. source income. This reduction would address, at least in part, the current law biases against the corporate form and equity finance. The distribution-related and CBIT prototypes would result in a lower overall tax rate on distributed than on undistributed corporate equity income, reversing the current law bias against corporate dividend distributions. However, this bias could be removed from the CBIT and dividend exclusion prototypes by allowing shareholders to adjust basis of stock for retained earnings through a Dividend Reinvestment Plan (DRIP). Only the shareholder allocation prototype, as designed, would completely remove the bias against corporate dividend distributions.

Absent a special provision such as the investment income tax discussed in Chapter 6, the CBIT prototype alone reduces the current law differentials across business income sources for tax exempt entities and foreign investors. For both classes of income recipient, CBIT equalizes the tax rate on all forms of business income—corporate equity income (whether or not distributed), noncorporate equity income, and interest. The only exception is rent and royalty income, which would be taxed as under current law. Thus, CBIT would address all three of the current law biases.

Table 13.1
Total U.S. Tax Rate on a Dollar of NonPreference, U.S. Source Income from a U.S. Business
Under Current Law and the Integration Prototypes

Type of Income	Current Law	Shareholder Allocation Integration	Distribution-Related Integration		
			Credit	Exclusion	CBIT
I. Individual Investor is Income Recipient					
Corporate Equity:					
Distributed	$t_c + (1 - t_c)t_i$	t_i	$[(1 - t_c)t_c + t_i - t_i^m]/(1 - t_i^m)$	t_c	t_i^m
Undistributed	$t_c + (1 - t_c)t_g$	t_i	$t_c + (1 - t_c)t_g$	$t_c + (1 - t_c)t_g$	$t_i^m + (1 - t_i^m)t_g$
Noncorporate Equity	t_i	t_i	t_i	t_i	t_i^m
Interest	t_i	t_i	t_i	t_i	t_i^m
Rents and Royalties	t_i	t_i	t_i	t_i	t_i
II. Tax Exempt Entity is Income Recipient					
Corporate Equity:					
Distributed	t_c	t_c	t_c	t_c	t_i^m
Undistributed	t_c	t_c	t_c	t_c	t_i^m
Noncorporate Equity	t_c	t_c	t_c	t_c	t_i^m
Interest	0	0	0	0	t_i^m
Rents and Royalties	0	0	0	0	0
III. Foreign Investor is Income Recipient					
Corporate Equity:					
Distributed	$t_c + (1 - t_c)t_{WD}$	$t_c + (1 - t_c)t_{WD}$	$t_c + (1 - t_c)t_{WD}$	$t_c + (1 - t_c)t_{WD}$	t_i^m
Undistributed	t_c	t_c	t_c	t_c	t_i^m
Noncorporate Equity	t_{WN}	t_{WN}	t_{WN}	t_{WN}	t_i^m
Interest	t_{WI}	t_{WI}	t_{WI}	t_{WI}	t_i^m
Rents and Royalties	t_{WR}	t_{WR}	t_{WR}	t_{WR}	t_{WR}

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 t_c = U.S. corporate income tax rate. t_i = U.S. individual income tax rate. t_i^m = Maximum U.S. individual income tax rate. t_g = U.S. effective individual tax rate on capital gains. t_{WD} , t_{WN} , t_{WI} , t_{WR} = U.S. withholding rates on payments to foreigners of dividends, noncorporate equity income, business interest, and rents and royalties, respectively. Generally varies by recipient and may be zero.

Tax Distortions in Real and Financial Investment Decisions

Although the most succinct measure of the economic benefits possible under each of the integration prototypes is the estimated welfare gain resulting from reduction or elimination of the tax distortions affecting real and financial investments, this is not the most descriptive or intuitive characterization of the effects of integration. In this section, we thus focus more directly on the extent of these distortions, relying on a more commonly used measure of the impact of the tax system on investment decisions—the cost of capital. Although the specific results noted are based on a specific CGE model (the augmented

Harberger model described in Section 13.F), these results are less sensitive to the model used than the estimates of the welfare gains, which will be discussed in the following sections. We therefore also defer discussion of the various CGE models used to the following sections.

An important effect of integration is that it would change the tax cost of real investment in the corporate sector. We measure the effects of taxes on investment decisions using the cost of capital concept described in Chapter 1. Taxes on capital income generally raise the cost of capital above investors' required rate of return. All other things equal, a higher cost of capital reduces incentives to invest. The cost of capital includes

the effects of tax rates, depreciation allowances, tax credits and inflation. The cost of capital also can depend on the method of financing. Our calculations are designed to be representative, and therefore reflect a mix of debt and equity financing.

As Section 13.B discusses, the size of the distortions created by the classical corporate tax system depends in part on whether one believes that there are nontax benefits and costs to alternative corporate financial policies so that differential taxation of financial arrangements can distort financing decisions.

Under current law, corporations can reduce the tax costs of investment by financing with debt rather than with equity and by retaining rather than distributing profits. Altering financial behavior to reduce tax liability may itself cause distortions, and raise the cost of capital. For example, as a corporation becomes more highly leveraged, it increases the chances that it will experience costs associated with financial distress. Investors in the corporation would require compensation for the expected value of these costs, thereby raising the return the corporation must earn on its investments. To capture such costs, the model augments the traditional corporate sector cost of capital to reflect compensation to investors for the efficiency costs of tax-induced distortions in corporate debt and dividend policy. Tax distortions in corporate financial policy raise the cost of capital for corporate investment, and thereby act as a disincentive to investment in the corporate sector. Because economists differ on the appropriate way to model costs of financial distortion, the Report also presents effects of integration prototypes on the cost of capital that ignore the efficiency costs of tax distortions in corporate financial behavior.

Corporate Financial Behavior

Description of the Model

Corporate financial policy—which affects the debt to asset (leverage) ratio and the dividend payout ratio—is determined within the model rather than assuming leverage and distribution

patterns at the outset. More specifically, the corporation chooses its financial policy to minimize its cost of capital. Consider first debt policy. Under current law a corporation may deduct its interest expense from its taxable income, so interest is taxed only to the lender. In contrast, corporate profits are taxed twice, because they are (in general) subject to both the corporate income tax and the individual income tax when distributed as dividends or recognized as a capital gain on corporate shares. Consequently, equity financed corporate investment is tax disadvantaged relative to debt financed corporate investment. This difference induces corporations to increase their use of debt. Increased use of debt, however, also carries with it the increased possibility that the corporation will incur costs associated with financial distress. In determining their leverage ratio, corporations trade off the lower tax cost of financing with debt against the nontax costs of debt, e.g., costs of financial distress. In contrast to some earlier treatments, however, debt is assumed to offer nontax benefits relative to equity (see the discussion in Section 13.B). That is, if debt and equity were taxed equally, we assume that corporations would continue to finance part of their capital stock using debt.⁴¹

Consider now corporate dividend policy. Under current law, the shareholder level taxes on dividends and retained earnings differ. Dividends are taxed as ordinary income, while retained earnings raise share values and are taxed on a realization basis as a capital gain. Because retained earnings benefit from the deferral of the second level of tax, they enjoy a tax advantage over dividends. On the other hand, corporate distributions may be valued differently by shareholders than retentions. As a result, the determination of optimal dividend distributions reflects a tradeoff of tax costs and nontax benefits.⁴²

For modeling purposes, the corporate dividend payout ratio divides real corporate earnings into dividends and retentions; all purely inflationary earnings values are assumed to come in the form of asset appreciation and to be taxed as a capital gain upon the sale of corporate shares. Corporations choose the real dividend payout ratio (ratio

of real dividends to real earnings) that minimizes the cost of equity financed investment. Because the inflationary component of nominal income is excluded, real payout ratios are higher than conventional nominal payout ratios. Although real dividends are the choice variable in the formal models, nominal dividend payout ratios also are presented in the results. Taxes are assumed not to affect financial choices in the noncorporate business and the owner-occupied housing sectors of the augmented Harberger model used in obtaining the results presented in this section.⁴³

Corporate Financial Policy Under Current Law and the Integration Prototypes

Table 13.2 shows a measure of the size of the tax incentive for a corporation to finance with debt rather than with equity and to retain rather than distribute profits. Results are presented for a neutral tax system that does not distort these decisions, for current law, and for each of the integration prototypes. The table also shows estimates of the effects of these tax incentives on corporate borrowing and dividend distribution policy.

Consider first corporate borrowing policy. Under a neutral tax system, neither debt nor equity would be tax favored, so there would be no tax advantage to debt. The behavioral model predicts that under such a tax system, corporations on average would finance 30 percent of their investments using debt. In contrast to the neutral tax system, current law discriminates against equity finance. To cover its higher tax cost and still offer the ultimate investor a 4 percent real after-tax rate of return, an equity financed investment must earn a real pre-tax rate of return that is 3.7 percentage points higher than would be required were the same investment instead financed with debt. Given the assumptions used in the calculation, this is equivalent to a 90 percent higher real after-tax required rate of return. The extra 3.7 percentage point return reflects debt's tax advantage over equity and is the amount needed to pay the higher taxes on the double-taxed equity investment. Because of this tax advantage to debt, or penalty to equity,

corporations are induced to use more debt than under the neutral tax system and choose a 37 percent leverage ratio, 7 percentage points greater than its value under a neutral tax regime.⁴⁴

Compared to current law, all the integration prototypes would reduce debt's tax advantage over equity. Consequently, all of the prototypes would promote more efficient corporate borrowing decisions by moving the corporate leverage ratio closer to its undistorted value. As modeled, CBIT eliminates differences in the taxation of debt and equity by taxing all corporate income once at the entity level at a 31 percent statutory rate. Under CBIT, corporate borrowing decisions would be undistorted by taxes. The other prototypes reduce debt's current tax advantage over equity less significantly.

Consider now corporate dividend policy. Under a neutral tax system, neither dividends nor retained earnings are tax-favored, so there is no tax advantage to retentions, nor penalty on dividends. The behavioral model predicts that under such a tax system, corporations would distribute as dividends 80 percent of their real after-corporate tax profits, while retaining and reinvesting the remaining 20 percent of real after-tax profits.

In contrast to the neutral tax system, current law favors retained earnings over dividends. Given the assumptions underlying Table 13.2, this tax advantage is 1.1 percentage points. That is, under current law, to provide an equity investor with a real after-tax rate of return of 4 percent, a corporation distributing all of its earnings as dividends must earn a real pre-tax rate of return that is 1.1 percentage points greater than that required were the company instead to retain its earnings. As a result of this tax distortion, corporations pay out roughly 73 percent of their after-tax real profits as dividends instead of the fully efficient 80 percent. Including inflation in the measure of after-tax corporate profits yields a corresponding nominal dividend payout ratio under current law of about 43 percent.

All the integration prototypes reduce the tax on dividends relative to that on retained earnings.

Table 13.2
Effect of Integration on Corporate Financial Policy¹

	Undistorted	Current Law	Shareholder Allocation Integration	Distribution-Related Integration		CBIT
				Credit	Exclusion	
A. Scaled Tax Rate Replacement						
Corporate borrowing policy						
Tax incentive to borrow ²	.000	.037	.035	.036	.035	.000
Leverage ratio ³	30.0%	36.6%	36.5%	36.5%	36.5%	30.0%
Corporate dividend policy						
Tax penalty on dividends ⁴	.000	.011	.000	-.010	-.005	.000
Dividend payout ratio						
Real ⁵	80.0%	72.8%	80.0%	85.9%	82.9%	80.0%
Nominal ⁶	-	42.8%	42.8%	46.4%	45.9%	42.7%
B. Lump Sum Replacement						
Corporate borrowing policy						
Tax incentive to borrow ²	.000	.037	.022	.023	.026	.000
Leverage ratio ³	30.0%	36.6%	34.6%	34.7%	35.1%	30.0%
Corporate dividend policy						
Tax penalty on dividends ⁴	.000	.011	.000	-.006	-.003	.000
Dividend payout ratio						
Real ⁵	80.0%	72.8%	80.0%	84.4%	82.4%	80.0%
Nominal ⁶	-	42.8%	42.8%	45.5%	45.2%	42.7%

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¹Calculations are based on the augmented Hargerber Model described in section 13.F. All calculations assume a 3.5 percent inflation rate and a 4 percent real after-tax rate of return.

²Calculated as the difference between the cost of capital for an equity financed investment and that for a debt financed investment. The calculations assume that tax depreciation equals economic depreciation and that the corporate tax rate is the maximum statutory rate. Debtholder and shareholder tax rates are estimates of average effective marginal rates based on calculations from the Office of Tax Policy Individual Tax Model, adjusted for the taxation of banks, insurance companies and tax exempt institutions.

³The ratio of debt to total assets.

⁴Calculated as the difference between the cost of capital for an investment whose return is subject to the dividend tax and one whose return is subject to tax as a capital gain.

⁵The ratio of (cash) dividends to after-tax real profits.

⁶The ratio of (cash) dividends to after-tax nominal profits.

Therefore, all of the prototypes encourage corporations to raise their dividend payout ratio. Both the shareholder allocation prototype and CBIT achieve uniformity in the taxation of real dividends and real capital gains. Under either prototype there is no tax penalty (nor tax advantage) to dividends, so corporations would choose the efficient 80 percent real dividend payout ratio defined by the model. Even when the taxation of distributions out of tax preference or foreign-taxed income is considered (this feature is ignored in

the model results), both of these prototypes are found to come very close to eliminating tax distortions relating to payout decisions.

The distribution-related prototypes reverse the bias under current law. They tax retentions less favorably than dividends because they provide relief from the double tax on corporate equity only to the extent that earnings are distributed. This is illustrated in Table 13.2 by a negative tax penalty, i.e., a tax advantage to dividends relative to retentions for the distribution-related prototypes. Because of this favorable tax treatment, this prototype encourages corporations to pay about 83 percent of real after-tax profits (or about 46 percent of nominal after-tax profits) as dividends, as opposed to the 72 percent payout ratio (43 percent of nominal after-tax profits) under current law.⁴⁵

Table 13.2 also presents calculations based on lump-sum replacement taxes. In these calculations, all the

integration prototypes encourage (1) more efficient corporate borrowing decisions by reducing the tax advantage to debt and the leverage ratio and (2) higher, generally more efficient, dividend distributions.

Cost of Capital Under Integration Prototypes

Tables 13.3, 13.4, and 13.5 summarize the cost of capital calculations. Current law imposes

a tax penalty on investment in the corporate sector and financial distortions can raise this penalty. Thus, current law can create important distortions in the allocation of the U.S. capital stock. To assess effects of the integration prototypes on the current tax penalty on corporate investment, effects on the cost of capital must be calculated. Table 13.3 presents the effect of the current tax system on the cost of capital among sectors calculated both with and without the inclusion of the costs of the financial distortions. Table 13.4 reports calculations of the cost of capital which include the efficiency cost of tax distortions in corporate financial policy, while the calculations in Table 13.5 ignore such costs. The estimated reductions in the costs of capital suggest that the integration prototypes enhance economic efficiency relative to current law. All of the prototypes reduce the tax bias against investment in the corporate sector under current law, thereby improving the allocation of capital among sectors in the economy.

These calculations again assume that investors require a 4 percent real, financing distortion adjusted, after-tax rate of return on all investments, and that the expected inflation rate is 3.5 percent. The summary measures reported in the table are weighted averages of more detailed calculations of the cost of capital for each of 38 real assets, including 20 types of equipment, 14 types of nonresidential structures, residential structures, residential and nonresidential land, and inventories.

Cost of Capital Under Current Law

As noted above, there is no universally agreed upon model of effects of financial distortions on the cost of capital. The calculations in the first column of Table 13.3 therefore ignore such distortions. In these calculations, no premium is imposed to compensate investors for the deviation of the leverage and dividend payout ratios from their undistorted values.

To illustrate the effects of the corporate income tax on the cost of capital, Panel A shows both the corporate and noncorporate cost of

capital for three particular investments: engines and turbines, industrial buildings, and business (nonresidential) land. The cost of capital for each asset is higher if the investment is undertaken by a corporation, because of the extra tax, than if the investment is undertaken by a noncorporate business. An investment in an industrial building, for example, must earn a real return of 6.5 percent if the investment is made by a corporation, but only 5.1 percent if the investment is made by a noncorporate business. These estimates reflect a significant disincentive for corporate investment; to cover extra taxes, the corporate investment must earn 27.5 percent more than the comparable noncorporate investment.

The summary measures in Panel B of Table 13.3 also illustrate the current tax bias against investment in the corporate sector. On average, the cost of capital for corporate sector investment (5.9 percent) exceeds the cost of capital for investment in the noncorporate sector (4.9 percent). Some of this difference, however, results from a different mix of capital assets in the corporate and noncorporate sector, hence only part of the difference is due to intersectoral tax distortions.

Table 13.3
Cost of Capital Under Current Law

	No Financial Distortions	With Financial Distortions
A. Representative Assets		
Engines and turbines		
Corporate	.051	.052
Noncorporate	.044	.044
Industrial buildings		
Corporate	.065	.066
Noncorporate	.051	.051
Business land		
Corporate	.061	.063
Noncorporate	.049	.049
B. Summary Measures		
Average Cost of Capital		
Corporate	.059	.060
Noncorporate	.049	.049
Owner-occupied housing	.040	.040
Economy wide	.050	.051
Coefficient of Variation	.155	.165

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Owner-occupied housing has the lowest cost of capital (4.0 percent). The return on owner-occupied housing is virtually free of tax because (1) the imputed rental value of the housing is not taxed to the owner, and (2) interest on debt financing is includable by the lender and deductible by the owner. Unless the lender's tax bracket is higher than the borrower's, the tax system as a whole does not collect tax on the return on the investment. Thus, current law discourages investment in the corporate sector in favor of investment in noncorporate enterprises, and discourages investment in business enterprises in favor of investment in owner-occupied housing. Overall, capital income taxes increase the average cost of capital for the economy as a whole (5.03 percent) to a level greater than the investor's required after-tax real return (4 percent). Current law may reduce the level of resources devoted to investment and capital formation and distort the allocation of capital across sectors of the economy.

The last line in Panel B shows the coefficient of variation for the cost of capital. The coefficient of variation is a summary measure of the degree of dispersion in the cost of capital. If all investments were taxed equally, all would have the same cost of capital and the coefficient of variation would be zero. Taxes that distort investment decisions create dispersion in the cost of capital and raise the coefficient of variation. Under current law, the coefficient of variation is 0.155.

The second column of Table 13.3 includes in the corporate cost of capital a premium for tax distortions in corporate borrowing and dividend policies. Tax distortions in corporate financial policies raise the cost of capital for corporate sector investments by approximately 0.1 percentage point, compared to the prior calculations which ignore financial distortions, while leaving unchanged the cost of capital for investments in the noncorporate sector and in owner-occupied housing. Including financial distortions, therefore, increases the tax-induced disparity in the cost of capital between corporate and other investments. With financial distortions, current law's coefficient of variation in the cost of capital is

0.165, greater than the 0.155 coefficient of variation obtained when financial distortions are ignored. By raising the cost of investing in the corporate sector, financial distortions also raise slightly the overall cost of investing in the economy.

Cost of Capital Under the Integration Prototypes

Tables 13.4 and 13.5 present summary measures of the cost of capital under current law and each of the integration prototypes, with and without financial distortions, respectively. Table 13.4 presents calculations assuming scaled tax rates for replacement revenue (Panel A), and lump-sum replacement taxes (Panel B). All the calculations in Table 13.4 assume that corporations vary their borrowing and dividend distributions in response to changes in tax rates, and include a premium for tax-induced distortions in corporate borrowing policy.

Table 13.4 presents results from calculations that include the efficiency cost of tax distortions in corporate financial policy. In these calculations the integration prototypes change both the corporate leverage ratio and dividend payout ratio from their values under current law, but also change the magnitude of the associated financial distortions. In the scaled-tax-rate calculations, statutory tax rates on capital income are increased or decreased proportionately to hold the overall tax burden on investment at its current level. Each prototype reduces the corporate cost of capital toward the lower average for the rest of the economy, thereby reducing the coefficient of variation below its current law level. CBIT reduces the coefficient of variation in the cost of capital most significantly. Compared to current law, CBIT reduces the coefficient of variation in the cost of capital by more than one-third, from 0.165 to 0.104. The other prototypes produce a smaller reduction in the coefficient of variation, a reduction that is nearly the same for each prototype. Thus, in these calculations, CBIT provides the greatest incentive for an efficient allocation of physical capital.⁴⁶

Table 13.4
The Cost of Capital
Under Current Law and the Integration Prototypes:
With Financial Distortions

	Current Law	Shareholder Allocation Integration	Distribution-Related Integration		CBIT
			Credit	Exclusion	
A. Scaled tax rate replacement					
Average cost of capital					
Corporate sector	.060	.057	.057	.058	.053
Noncorporate sector	.049	.052	.052	.051	.054
Owner-occupied housing sector	.040	.040	.040	.040	.042
Economy wide	.051	.051	.051	.051	.050
Coefficient of variation	.165	.143	.144	.148	.104
B. Lump sum replacement					
Average cost of capital					
Corporate sector	.060	.052	.052	.054	.056
Noncorporate sector	.049	.049	.049	.049	.057
Owner-occupied housing sector	.040	.040	.040	.040	.043
Economy wide	.051	.048	.048	.049	.053
Coefficient of variation	.165	.107	.111	.120	.123

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The results based on lump-sum replacement taxes presented in Panel B are similar to those in Panel A. All prototypes reduce current tax distortions in the allocation of capital, particularly by reducing taxes on corporate investment relative to investment elsewhere in the economy. Thus, all prototypes lower the coefficient of variation in the cost of capital. The lump-sum replacement mechanism, however, allows all of the prototypes except CBIT to benefit from lower taxes on capital income. Consequently, the shareholder allocation prototype most significantly reduces the coefficient of variation, and provides the greatest incentive for an efficient allocation of physical capital.

Table 13.5 presents cost of capital calculations that abstract from the costs of tax distortions in corporate financial policy. In those calculations, financing is unaffected by tax policy changes, so corporations have a 73 percent real dividend payout ratio and a 37 percent leverage ratio under current law as well as under the integration prototypes.

In the scaled tax rate calculations, benefits from CBIT still exceed those of other prototypes, but because CBIT reduces financial distortions more than other prototypes, there is less difference between CBIT and the other prototypes in Table 13.5 than in Table 13.4. Nonetheless, the results in the two tables are similar. In both tables, each prototype reduces the extra tax cost of investing in the corporate sector, therefore encouraging a more efficient allocation of capital. Additionally, in both tables, shareholder allocation leads to the greatest reduction in the coefficient of variation in the calculations based on

lump-sum replacement, while CBIT reduces the coefficient of variation most in the calculations based on the scaled tax rate replacement mechanism.

13.F INTEGRATION AND THE ALLOCATION OF RESOURCES

This section reviews the simulated effects of each integration prototype on the allocation of resources and economic efficiency. Results from three models are presented. The first is a Harberger-type CGE model modified to account for tax distortions in corporate financial policies. The two alternative CGE models respond to important limitations of the Harberger-type model. Overall, the cost of capital calculations provided in the preceding section are reinforced by the results from the more comprehensive CGE calculations.

Table 13.5
The Cost of Capital
Under Current Law and The Integration Prototypes:
No Financial Distortions

	Current Law	Shareholder Allocation Integration	Distribution-Related Integration		CBIT
			Credit	Exclusion	
A. Scaled tax rate replacement					
Average cost of capital					
Corporate sector	.059	.055	.056	.057	.053
Noncorporate sector	.049	.052	.052	.051	.054
Owner-occupied housing sector	.040	.040	.040	.040	.042
Economy wide	.050	.050	.050	.051	.050
Coefficient of variation	.155	.137	.138	.143	.103
B. Lump sum replacement					
Average cost of capital					
Corporate sector	.059	.051	.052	.053	.056
Noncorporate sector	.049	.049	.049	.049	.057
Owner-occupied housing sector	.040	.040	.040	.040	.043
Economy wide	.050	.047	.048	.048	.053
Coefficient of variation	.155	.103	.108	.115	.123

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final goods. In the original model, the total supplies of capital and labor were fixed. In the augmented model, the supplies of labor and capital can vary depending on their rates of return, but in the simulations the supply of capital is held constant. Investment decisions are based on the cost of capital described in the preceding section.

Harberger's approach implicitly assumed that corporate financial policy was unaffected by the tax system. In contrast, the augmented model incorporates the model of financial behavior discussed above, and so allows the tax system to influence corporate borrowing and dividend policies. Allowing financial

decisions to be influenced by the tax system is particularly important in the present context, because previous research has suggested that ignoring tax-induced distortions in financial behavior can lead to substantial underestimates of the efficiency costs of the classical income tax system.⁴⁹

As emphasized earlier, the simulation of each integration prototype holds constant real government spending. As in the discussion of the cost of capital, we emphasize calculations using scaled tax rates, though calculations based on lump-sum replacement taxes are presented for comparison.

The method of estimation proceeds by comparing a single equilibrium representing current law with a corresponding equilibrium under each integration prototype. The simulations are static, in the sense that they abstract from savings and growth issues by holding constant the economy's capital stock in the face of each prototype's tax changes. Thus, the model captures effects from

The Augmented Harberger Model

Model Description

In Harberger's original model, the corporate tax induces capital to leave the corporate sector, a migration that continues until after-tax returns are equalized in the corporate and noncorporate sectors. Through this adjustment process the burden of the corporate tax is spread to owners of noncorporate capital and possibly to labor.⁴⁷ The corporate tax thus causes too much capital to be allocated to the noncorporate sector and not enough to the corporate sector, so that an inefficient allocation of resources results.

The first model used to study the integration prototypes is an augmented version of Harberger's original contribution.⁴⁸ While the original Harberger model had only two sectors, the augmented model embodies a richer depiction of the economy. It has 18 industries and 35 different types of assets, and includes both intermediate and

the prototype's shifts in the allocation of real resources across sectors and industries and from changes in corporate financial decisions, but abstracts from any tax-induced changes in saving and capital formation. Since integration generally is perceived as a way to improve the static allocation of real resources and to improve corporate financial policy, this is appropriate.⁵⁰

Simulation Results

Table 13.6 presents the results of simulations that include the costs of tax distortions in

corporate financial policy, and Table 13.7 presents results of calculations excluding such costs. The results in Table 13.6 that include the costs of financial distortions illustrate most broadly the costs of tax distortions under current law.

The first three rows of Panel A show each prototype's effect on the allocation of capital, based upon the scaled-tax-rate replacement mechanism. In these calculations, CBIT generates the largest changes in capital allocation. CBIT increases the corporate share of capital by almost 5 percentage points, and decreases the share of

Table 13.6
General Equilibrium Results, Augmented Harberger Model:
With Financial Distortions

	Shareholder Allocation Integration	Distribution-Related Integration		
		Credit	Exclusion	CBIT
A. Scaled tax rate replacement				
Percentage change in capital allocation ¹				
Corporate sector	2.6	2.3	1.7	4.6
Noncorporate sector	-2.7	-2.4	-1.8	-3.8
Owner-occupied housing	0.1	0.1	0.1	-0.8
Annual change in welfare ² , by source of change, as a percentage of consumption (and as a percentage of tax revenue from corporate capital)				
Consumption	0.10 (2.38)	0.10 (2.38)	0.08 (1.90)	0.20 (4.76)
Corporate debt policy	-0.00 (-0.00)	-0.00 (-0.00)	-0.00 (-0.00)	0.17 (4.05)
Corporate dividend policy	0.03 (0.71)	0.01 (0.24)	0.03 (0.71)	0.03 (0.71)
Total	0.13 (3.09)	0.11 (2.62)	0.11 (2.62)	0.40 (9.52)
B. Lump sum replacement				
Percentage change in capital allocation ¹				
Corporate sector	3.4	3.2	2.6	4.3
Noncorporate sector	-2.5	-2.4	-1.9	-4.2
Owner-occupied housing	-0.9	-0.8	-0.6	-0.1
Annual change in welfare ² , by source of gain, as a percentage of consumption (and as a percentage of tax revenue from corporate capital)				
Consumption ²	0.24 (5.71)	0.23 (5.47)	0.20 (4.76)	0.10 (2.38)
Corporate debt policy ³	0.08 (1.90)	0.07 (1.67)	0.06 (1.43)	0.16 (3.81)
Corporate dividend policy ³	0.03 (0.71)	0.02 (0.48)	0.03 (0.71)	0.03 (0.71)
Total	0.35 (8.33)	0.32 (7.62)	0.29 (6.90)	0.29 (6.90)

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¹These represent changes in each sector's share of total private capital.

²Welfare changes from improvements in real resource allocation are measured as changes in "expanded" national income, i.e., changes in national income plus changes in the value of leisure.

³Welfare changes from changes in financial policies are measured using an excess burden function derived from investors' preferences for debt and for equity.

Table 13.7
General Equilibrium Results, Augmented Harberger Model:
No Financial Distortions

	Shareholder Allocation Integration	Distribution-Related Integration				
		Credit		Exclusion		CBIT
A. Scaled tax rate replacement						
Percentage change in capital allocation ¹						
Corporate sector	2.5		2.1		1.6	4.1
Noncorporate sector	-2.6		-2.2		-1.7	-3.5
Owner-occupied housing	0.1		0.1		0.1	-0.6
Annual change in welfare ² as a percentage of consumption (and as a percentage of tax revenue from corporate capital)	0.08 (1.95)	0.08 (1.71)		0.07 (1.71)		0.17 (4.15)
B. Lump sum replacement						
Percentage change in capital allocation ¹						
Corporate sector	3.3		2.9		2.4	3.8
Noncorporate sector	-2.4		-2.2		-1.8	-3.9
Owner-occupied housing	-0.8		-0.7		-0.6	0.1
Annual change in welfare ² as a percentage of consumption (and as a percentage of tax revenue from corporate capital)	0.21 (5.12)	0.20 (4.88)		0.17 (4.15)		0.07 (1.71)

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¹These represent changes in each sector's share of total private capital.

²Welfare changes are measured as changes in "expanded" national income, i.e., changes in national income plus changes in the value of leisure.

capital allocated to other sectors by an equivalent amount. The other prototypes stimulate somewhat smaller changes in the allocation of capital across sectors.

The next set of calculations in Panel A represents effects on economic well-being resulting from adoption of each prototype. Economic welfare effects are shown separately for (1) the gain caused by the improved consumption choices made possible by integration's improvement in the allocation of real resources, and (2) the gain due to improved corporate financial policy. These welfare gains do not reflect gains (or losses) arising from changes in savings and economic growth attributable to the prototypes. Two welfare measures are presented. The first measure expresses the welfare gain as a percentage of consumption under current law, and can be interpreted as the percentage gain in annual consumption possible under each prototype once

the economy fully adjusts to the change in law and reaches its new equilibrium. The second measure (in parentheses) expresses the welfare gains as a percentage of the annual tax revenue from corporate capital income.

In this model, the annual economic welfare gains from the improved allocation of resources range from 0.08 to 0.20 percent of current consumption or 1.9 to 4.8 percent of tax revenue from corporate capital income (equivalent to a range of about \$2.3 to \$5.7 billion per year). CBIT produces welfare gains at least twice as large as that generated by the other prototypes.

The other integration prototypes generate a smaller improvement from a more efficient allocation of real resources, equivalent to about 0.10 percent of current consumption for each. Thus, although these prototypes appear structurally different, from an economic perspective they may

be quite similar. Indeed, this result can be anticipated from the above discussion of the cost of capital, which showed that these prototypes had nearly identical effects on the coefficient of variation in the cost of capital.

The next simulated economic welfare gain represents welfare effects of changes in corporate debt policy. All the integration prototypes lower the corporate leverage ratio. CBIT, however, completely eliminates the tax bias against equity, thereby producing the largest gain, equivalent to 0.17 percent of consumption, or more than 4 percent of tax revenue from corporate capital (about \$4.8 billion). The dividend exclusion and shareholder allocation integration prototypes produce only negligible gains from this source.

Table 13.6 also shows the simulated economic welfare effects of changes in corporate dividend policy. With the exception of the imputation credit prototype, the prototypes yield welfare gains in this respect that are equivalent to an annual increase in consumption of 0.03 percent (or 0.71 percent of tax revenue from corporate capital). Welfare gains accompanying the imputation credit prototype are smaller at this margin.

Combining the economic welfare effects from changes in debt policy and changes in dividend policy, shows that all three prototypes improve overall corporate financial policy. These gains are largest for CBIT. By eliminating distortions in corporate financial policy, CBIT produces a welfare gain equivalent to 0.20 percent of consumption, or 4.76 percent of tax revenue from corporate capital. The shareholder allocation prototype and the dividend exclusion prototype produce much smaller welfare gains from improvements in corporate financial policy, roughly equivalent to 0.03 percent of consumption, (0.71 percent of tax revenue from corporate capital). Perhaps the most striking feature of these results is that the CBIT prototype's welfare gains from improved corporate financial policy are as large as the welfare gains from improved real resource allocation.

The total improvement in economic welfare ranges from a high under CBIT of 0.40 percent of consumption to a low for the imputation credit and dividend exclusion prototypes of 0.11 percent of consumption. By contributing most significantly to the efficient allocation of real resources and to the promotion of efficient corporate financial choices, CBIT stimulates the largest gains in economic welfare.

Panel B presents results based on lump-sum replacement taxes. In some respects these calculations are similar to those in Panel A. For example, in both set of calculations, the integration prototypes expand modestly the size of the corporate sector relative to the rest of the economy. In addition, in both sets of calculations, all prototypes generate modest economic welfare gains. In the calculations based on lump-sum replacement taxes, however, all prototypes except CBIT show welfare gains from reducing taxes on capital income (and replacing them with more efficient lump-sum taxes). In contrast, as modeled, CBIT raises distorting taxes on corporate capital income and distributes the excess revenue to consumers through lump-sum rebates. Consequently, CBIT compares less favorably with the other prototypes in the lump-sum calculations than in the scaled tax rate calculations, although this result is largely an artifact of the revenue estimate for CBIT obtained from this model. In the lump-sum calculations, the shareholder allocation prototype produces the largest improvement in economic well being, roughly equivalent to an annual gain of 0.35 percent of consumption.

Table 13.7 presents results of calculations that do not include the cost of tax-induced distortions in corporate financial policy. In those calculations, the prototypes do not change financial variables from current law values, and financial distortions do not create welfare costs.

The calculations in Table 13.7 are similar in several respects to those reported in Table 13.6. All prototypes continue to shift capital into the corporate sector and produce overall gains in

welfare, measured relative to annual consumption or annual tax revenue from corporate capital. The shareholder allocation prototype increases economic welfare the most under the lump-sum replacement taxes, while CBIT increases economic welfare the most under the scaled-tax replacement approach.

The Mutual Production Model

Model Description

An important problem with models based on the original Harberger approach is the implicit assumption that if a commodity is produced in the corporate sector, it also cannot be produced in the noncorporate sector, and vice versa. This conflicts with empirical evidence of such coexistence. To address this issue, we use a Mutual Production Model (MPM), in which corporate and noncorporate businesses coexist in industries because each has certain advantages: corporate businesses, which are relatively large, have the advantage of economies of scale, and noncorporate businesses, which are smaller, have the advantage of more effective managerial skill.⁵¹

This approach has been incorporated in a large-scale model that contains twelve sectors and allows for the production of capital goods as well as intermediate goods (goods used in other businesses). Each industry produces with managerial input, labor input, and a fixed capital composite of 31 different assets. The model is a closed economy model characterized by a representative consumer, a fixed labor supply, and a fixed capital stock. Financial decisions about corporate debt to equity and dividend payout ratios are affected by the tax system.

In many ways, the analysis of resource allocation in the modified MPM is structurally similar to the augmented Harberger model discussed above.⁵² For example, both are disaggregated, competitive models, which base decisions about capital allocations on the user cost of capital. In addition, both are closed economy models that abstract from international capital flows. The models differ, however, in at least two key

respects. First, greater substitution exists between corporate and noncorporate activity in the MPM than in the augmented Harberger model. Second, the MPM assumes a fixed labor supply, while the augmented Harberger model allows labor supply decisions to vary depending upon the after-tax wage rate. Consequently, one would expect similar, but not necessarily identical, results from the two models. Results from the MPM are presented in Table 13.8.

Simulation Results

Panel A of Table 13.8 presents the results of calculations based on the scaled-tax-rate adjustment approach. The first rows of panel A show the percentage change in the share of total capital used in each of the corporate, noncorporate business, and owner-occupied housing sectors, respectively. All of the prototypes shift capital (and other resources) into the corporate sector. CBIT's 7.1 percentage point increase in the corporate sector's share of total capital would be the largest shift, while the dividend exclusion prototype's 2.9 percentage point increase would be the smallest. For all prototypes, the resource flow into the corporate sector come primarily from a contraction of the noncorporate business sector, but owner-occupied housing also would decline slightly in the CBIT and imputation credit prototypes.

The next two rows of panel A illustrate the change in corporate financial policy attributable to each prototype. As a point of reference, a 5 percentage point reduction in the corporate leverage ratio would eliminate current law's distortion in this model. In these calculations, CBIT eliminates the tax incentive to borrow, and thus reduces the corporate leverage ratio to its undistorted level. The shareholder allocation prototype achieves only a slight reduction. In contrast, the distribution-related prototypes do not improve corporate borrowing policy in this model.⁵³

Both the shareholder allocation and CBIT prototypes eliminate the tax penalty on dividends. Consequently, under both prototypes, corporations increase their real dividend payout ratio by 9

Table 13.8
General Equilibrium Results, Mutual Production Model:
With Financial Distortions

	Shareholder Allocation Integration	Distribution-Related Integration		CBIT
		Credit	Exclusion	
A. Scaled tax rate replacement				
Percentage change in capital allocation ¹				
Corporate sector	4.3	5.5	2.9	7.1
Noncorporate sector	-4.5	-5.3	-3.0	-6.7
Owner-occupied housing	0.2	-0.2	0.1	-0.4
Percentage change in financial policy relative to current law				
Corporate debt to asset ratio	-1.0	2.0	1.0	-5.0
Real dividend payout ratio	9.0	16.0	10.0	9.0
Annual change in welfare ² , by source of change, as a percentage of consumption (and as a percentage of tax revenue from corporate capital)				
Consumption	0.27 (3.57)	0.37 (4.90)	0.22 (2.91)	0.43 (5.69)
Corporate debt policy	0.06 (0.79)	-0.22 (-2.91)	-0.10 (-1.32)	0.23 (3.05)
Corporate dividend policy	0.07 (0.94)	0.01 (0.13)	0.07 (0.93)	0.07 (0.93)
Total	0.40 (5.30)	0.16 (2.12)	0.19 (2.52)	0.73 (9.67)
B. Lump sum replacement				
Percentage change in capital allocation ³				
Corporate sector	6.1	6.2	4.2	7.2
Noncorporate sector	-5.0	-5.0	-3.5	-6.7
Owner-occupied housing	-1.1	-1.2	-0.7	-0.5
Percentage change in financial policy relative to current law				
Corporate debt to asset ratio	-3.0	-1.0	-1.0	-5.0
Real dividend payout ratio	9.0	14.0	10.0	9.0
Annual change in welfare ² , by source of gain, as a percentage of consumption (and as a percentage of tax revenue from corporate capital)				
Consumption ²	0.54 (7.15)	0.50 (6.62)	0.39 (5.16)	0.44 (5.83)
Corporate debt policy ³	0.11 (1.46)	0.11 (1.46)	0.07 (0.93)	0.23 (3.04)
Corporate dividend policy ³	0.07 (0.93)	0.04 (0.53)	0.07 (0.93)	0.07 (0.93)
Total	0.72 (9.54)	0.65 (8.61)	0.53 (7.02)	0.74 (9.80)

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¹These represent changes in each sector's share of total private capital.

²The model measures the welfare change from an improved allocation of real resources as the compensating variation of the change from current law to integration. Compensating variation is a measure of the dollar value of the change in consumer's utility as a result of integration.

³Welfare changes from changes in financial policies are measured using an excess burden function derived from investor's preferences for debt and for equity.

percentage points to the undistorted value calibrated in the model. Corporations also increase their dividend payout ratio under the two distribution-related prototypes. Because distribution-related prototypes relieve the corporate level tax on corporate equity only to the extent profits are distributed, corporations actually pay an inefficiently large fraction of their earnings as dividends under these prototypes. Nonetheless, compared to current law, both prototypes encourage corporations to reduce the difference between their actual payout ratio and the undistorted payout ratio.

The final four rows of Panel A present each prototype's welfare changes in total, and a decomposition by the source of change. Annual welfare gains are expressed as a percentage of consumption under current law and as a percentage of current revenue from corporate capital income (in parentheses). By improving the allocation of resources, all of the prototypes generate improved consumption choices, but CBIT has the largest improvement, equivalent to 0.43 percent of consumption. The dividend exclusion prototype yields the smallest improvement, equivalent to 0.22 percent of consumption.

The shareholder allocation and CBIT prototypes improve corporate borrowing policy. CBIT generates an economic welfare gain equivalent to 0.23 percent of consumption. While the welfare gain accompanying the shareholder allocation prototype is smaller in this dimension, the distribution-related prototypes encourage corporations to increase borrowing slightly above levels under current law and thereby generate a small welfare loss.

The shareholder allocation and CBIT prototypes both eliminate the tax distortion in corporate dividend policy, and in so doing generate a small welfare gain equivalent to 0.07 percent of consumption. Although the distribution-related prototypes encourage firms to distribute an inefficiently large fraction of their profits as dividends, by inducing firms to move the payout ratio closer to its undistorted level, both generate welfare gains at this margin.

In total, in the scaled-tax-rate calculations the prototypes produce annual economic welfare gains ranging from a low of under 0.2 percent of consumption for distribution-related integration to a high of 0.73 percent of consumption for CBIT. In these calculations, CBIT generates as large or larger welfare gains than the other prototypes in every category.

Panel B shows calculations based on lump-sum replacement. In these calculations, all of the prototypes promote more efficient consumption, corporate borrowing, and corporate dividend policies. The other prototypes compare more favorably to CBIT than in panel A because, as modeled, CBIT would raise taxes on capital income, while the other prototypes would lower capital income taxes. Consequently, although in part an artifact of the modeling, the shareholder allocation prototype would generate an annual welfare gain equivalent to 0.72, almost as large as that under CBIT (0.74 percent of consumption). Annual welfare gains for the imputation credit and dividend exclusion prototypes would be 0.65 and 0.53 percent of consumption, respectively.

Portfolio Allocation Model

Model Description

Both the augmented Harberger model and the MPM capture tax distortions in the allocation of physical capital among the corporate, non-corporate, and owner-occupied housing sectors. Both also capture tax distortions in the supply of corporate debt and dividends. Neither model, however, is designed to capture tax distortions in the allocation of financial assets across households. The portfolio allocation (PA) model addresses this shortcoming by focusing on tax distortions in household portfolio decisions.⁵⁴ The PA model combines an allocation of capital across sectors reflecting production characteristics and consumer preferences with an allocation of capital across investors and forms of investment through a portfolio mechanism. In the PA model, real and financial variables are determined simultaneously, and taxes can distort both real and financial decisions.

The PA model explicitly links individual financial decisions with real variables in the economy. Households and pension funds acquire securities in a manner consistent with their risk-return preferences, while businesses and the government sector issue securities to meet their demands for capital. Individuals allocate their wealth among corporate equity, noncorporate equity, rental housing, owner-occupied housing equity, durable goods, tax-exempt bonds, and taxable debt according to the riskiness as well as the after-tax rate of return on these assets. Individual households are distinguished by income and wealth levels, tax filing status, and whether they rent or own their homes.

Simulation Results

Results from the PA model are displayed in Tables 13.9 and 13.10. As with the other models, two sets of calculations are performed. In the first set of calculations, presented in Table 13.9, statutory tax rates on capital income are increased or decreased proportionately to satisfy the constraint that revenues remain constant. In an alternative set of calculations, presented in Table 13.10, lump-sum taxes or rebates are used to satisfy the equal yield constraint.

Scaled Tax Replacement. Table 13.9 presents integration's aggregate effects on the allocation of real and financial capital and on corporate financial policy. The top panel shows changes in the allocation of real capital. In the portfolio allocation model, all of the prototypes shift capital into the corporate sector. The CBIT prototype produces the largest increase in corporate capital, equivalent to 2.5 percent of total U.S. real capital, followed by shareholder allocation integration (1.7 percent expansion) and then by distribution-related integration (1.6 percent expansion for the dividend exclusion prototype). In all prototypes, the flow of capital into the corporate sector comes from a contraction of other sectors. The prototypes improve the allocation of capital within the business sector as well as between the business and nonbusiness sectors.

The middle panel of Table 13.9 presents changes in holdings of financial assets, divided into changes in households' holdings and changes in pension funds' holdings.⁵⁵ In the PA model, households can make financial investments in corporate stock, noncorporate equity interests, and debt. All of the prototypes induce households to raise their holdings of corporate stock. CBIT produces the largest such shift, equivalent to 6.5 percent of total wealth, compared to about 3 to 4 percent for the other prototypes. In addition, all prototypes reduce households' holdings of taxable bonds. The shareholder allocation and distribution-related prototypes produce a reduction equivalent to between 2.0 percent and 2.5 percent of total wealth. CBIT generates a larger reduction, and the household sector becomes a net borrower in the taxable debt market. Traditional tax-exempt debt holdings are largely unaffected by integration (except under CBIT). CBIT debt, which is tax-exempt to the lender, accounts for 11.6 percent of total wealth. To a large extent, CBIT debt substitutes for taxable debt under current law. Thus, it is useful to compare the sum of taxable and CBIT debt holdings under CBIT and current law. Combining CBIT's 14.8 percent reduction in taxable debt with the 11.6 percent of total wealth that corresponds to CBIT debt shows that CBIT reduces households' direct holdings of formerly taxable debt by 3.2 percent of total wealth. The other prototypes reduce direct household holdings of currently taxable debt by an amount equivalent to 2.0 to 2.5 percent of private wealth. Combining all types of debt shows that CBIT generates a larger reduction in direct debt holdings by households, equivalent to 4.3 percent of total wealth while the other prototypes generate a smaller reduction, equivalent to between 2.0 and 2.6 percent of wealth. Finally, note that holdings of noncorporate capital decline under all the integration prototypes.⁵⁶

Pension funds' portfolio shifts are the reverse of household portfolio shifts. In the PA model, pension funds allocate assets between debt and corporate equity. By lowering the tax burden households face on corporate equity, but not extending the tax reduction to pension funds, all prototypes induce pension funds to reduce

Table 13.9
The Effect of Integration on the Allocation of
Physical Capital, Wealth, and Corporate Financial Policy
Results from the Portfolio Allocation Model
(Scaled Tax Rate Replacement)

Prototype	Shareholder Allocation Integration	Distribution-Related Integration		CBIT
		Credit	Exclusion	
A. Change in the Allocation of Physical Capital (as a percent of total physical capital)				
Corporate Business	1.7%	1.3%	1.6%	2.5%
Noncorporate Business	-0.1%	-0.1%	-0.1%	-0.1%
Noncorporate Rental Housing	-0.3%	-0.3%	-0.4%	-0.4%
Total Noncorporate Capital	-0.4%	-0.4%	-0.5%	-0.5%
State and Local Government	-0.1%	-0.1%	-0.1%	0.0%
Owner-occupied Housing	-0.7%	-0.4%	-0.5%	-0.8%
Consumer Durables	-0.5%	-0.5%	-0.5%	-1.2%
Total Household Capital	-1.3%	-0.9%	-1.0%	-2.0%
B. Change in The Allocation Of the Household Sector's Portfolio (as a percent of total wealth)				
Corporate Stock	3.9%	3.2%	4.0%	6.5%
Debt				
Taxable to Investors	-2.3%	-2.0%	-2.5%	-14.8% ¹
Not Taxable to Investors				
Traditional Tax-Exempt	-0.1%	-0.1%	-0.1%	-1.2%
CBIT	0.0%	0.0%	0.0%	11.6%
Total Tax-Exempt	-0.1%	-0.1%	-0.1%	10.5%
Total	-2.4%	-2.0%	-2.6%	-4.3%
Noncorporate Business	-0.1%	-0.1%	-0.1%	0.0%
Noncorporate Rental Housing	-0.2%	-0.2%	-0.4%	-0.4%
Noncorporate Total Capital	-0.3%	-0.3%	-0.5%	-0.4%
Owner-occupied Housing	-0.6%	-0.4%	-0.4%	-0.7%
Consumer Durables	-0.5%	-0.4%	-0.5%	-1.1%
Total Household Capital	-1.1%	-0.8%	-0.9%	-1.8%
Pensions				
Corporate stock	-2.0%	-1.7%	-2.5%	-0.3%
Debt	2.0%	1.7%	2.5%	0.3%
C. Change in Corporate Financial Policy (in percentage points)				
Leverage Ratio	-3.2%	-2.7%	-2.3%	-14.7%
(Nominal) Dividend Payout Ratio	3.2%	3.3%	3.8%	3.0%

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Office of Tax Policy

¹The household sector goes from a net lender in the market for taxable bonds under current law to a net borrower under CBIT.

the distribution-related and shareholder allocation prototypes stimulate a move into corporate equity equivalent to between 1.5 and 1.9 percent of total wealth. CBIT generates a much larger net increase in holdings of corporate shares, equivalent to 6.2 percent of total wealth. The total shift from debt is equivalent to -4.0 percent of total wealth under CBIT, and to between -0.1 and -0.4 percent of total wealth for the other prototypes.⁵⁷

The bottom panel of Table 13.9 presents each prototype's effect on corporate borrowing and dividend policy. All prototypes encourage corporations to use less debt, but CBIT generates a 14.7 percentage point reduction in the corporate leverage ratio, much larger than the reduction generated by the other integration prototypes. Dividend payout ratios increase in all cases (by between 3.0 and 3.8 percentage points); not surprisingly, the largest such increase accompanies the dividend exclusion prototype.

corporate equity holdings and increase debt holdings. Consequently, for the economy as a whole, the shift out of debt and into equity is less pronounced than the change for the household sector alone. Overall, in their effects on households' direct holdings plus pension fund holdings,

Lump-Sum Tax Replacement. Table 13.10 summarizes PA model results illustrating integration's aggregate effects on the allocation of real and financial capital and on corporate financial policy assuming lump-sum taxes are used to maintain revenue neutrality. The allocational impacts of integration are qualitatively similar to those based on scaled tax rate

Table 13.10
Summary of the Effects of Integration on
Real and Financial Decisions:
Results from the Portfolio Allocation Model
(Lump Sum Replacement)

Prototype	Shareholder Allocation Integration	Distribution-Related Integration		CBIT
		Credit	Exclusion	
A. Change in the Allocation of Physical Capital (as a percent of total physical capital)				
Corporate Business	2.8%	2.6%	2.6%	2.8%
Total Noncorporate Capital	-0.3%	-0.3%	-0.3%	-0.4%
State and Local Government	-0.1%	-0.1%	-0.1%	0.0%
Total Household Capital	-2.3%	-2.2%	-2.2%	-2.3%
B. Change in the Allocation of the Household Sector's Portfolio (as a percent of total wealth)				
Corporate Stock	6.2%	5.5%	5.3%	6.5%
Debt	-3.8%	-3.3%	-3.1%	-4.1%
Total Noncorporate Capital	-0.3%	-0.2%	-0.2%	-0.4%
Total Household Capital	-2.0%	-1.9%	-1.9%	-2.1%
Pensions				
Corporate Stock	-2.3%	-2.0%	-1.9%	-0.2%
Debt	2.3%	2.0%	1.9%	0.2%
C. Change in Corporate Financial Policy (in percentage points)				
Leverage Ratio	-8.3%	-7.3%	-6.9%	-16.6%
Nominal Dividend Payout Ratio	3.25	3.4%	3.8%	3.0%
Department of the Treasury Office of Tax Policy				

replacement: (1) the share of physical capital allocated to the corporate sector rises while that allocated to the noncorporate and household sectors declines, (2) households shift toward corporate equity and away from debt, while pension portfolios are reallocated in the opposite direction, (3) corporations reduce their leverage ratio and increase their dividend payout ratio, and (4) CBIT generates shifts in the allocation of physical capital and financial assets that are at least as large as those generated by the other prototypes.

Summary of Results

There is no universal agreement about the most appropriate way to model the effects of the corporate income tax (and the effects of reforms of that tax) on real and financial decisions. This Report examined three different models of the

domestic economy to assess the likely effects of integration. The models are in general agreement with respect to the major effects of integration on capital allocation, corporate financial policy, portfolio allocation, and the overall effect on economic welfare.

The results of all the models indicate that integration will encourage capital to shift into the corporate sector. Most of this shift comes from the noncorporate business sector,⁵⁸ but in some cases owner-occupied housing also is reduced.

With only one exception, the models that allow for tax-induced distortions in corporate borrowing behavior agree that the integration proto-

types will improve efficiency by reducing corporate borrowing. In general, the models suggest that because shareholder allocation and CBIT reduce most significantly the tax penalty on corporate equity, they similarly reduce most significantly tax-motivated corporate borrowing.

The models also agree that the integration prototypes will increase corporate dividend payments relative to current law. Shareholder allocation integration and CBIT promote fully efficient corporate dividend policy, while the distribution-related prototypes can encourage corporations to make inefficiently large dividend payouts. Nonetheless, in some calculations even the distribution-related prototypes improve corporate dividend policy relative to current law.

All the models show that the integration proposals stimulate improvements in overall

economic well-being. The exact magnitude of the improvements can vary from model to model and from prototype to prototype, so integration's improvement in welfare ranges between 0.07 percent and 0.73 percent of current consumption. Importantly, these gains take into account that, for some of the prototypes, taxes would have to be raised to finance integration. Shareholder allocation integration and CBIT tend to produce the largest welfare gains. In addition to the traditional welfare improvement from the reallocation of physical capital (and other real resources) from the rest of the economy into the corporate sector, the models also show that, under reasonable assumptions, integration may stimulate important welfare gains from improvements in corporate financial policy.

Comparison of Welfare Gain Among Models

The welfare gains from integration are generally larger in the MPM than in the augmented Harberger model. This is especially true for the gain from improved resource allocation, and in some cases for the gain from changes in corporate financial policy as well. An important explanation for this difference is the MPM's greater substitutability between corporate and noncorporate businesses within an industry. Thus, in the MPM, current law reduces economic efficiency more than in the augmented Harberger model. Both models predict a similar range of welfare changes from changes in corporate debt, ranging from roughly zero to about 0.20 percent of consumption. Additional reasons for this variation include (1) slight differences in the underlying behavioral models in the measurement of the tax advantage of equity and (2) differences in the tax rates required for the scaled-tax-rate calculations.⁵⁹

The size of the simulated gains are comparable to, or can be reconciled with, results from simulations of similar tax law changes published in economic literature.⁶⁰ Consider first the gains from an improved allocation of real resources. Using a simple two sector model, Harberger originally estimated that the corporate income tax's distortion in the allocation of real resources

produced a welfare gain roughly equivalent to between 0.5 percent and 1.0 percent of GNP, corresponding to between 0.75 percent and 1.5 percent of consumption. Shoven corrected two errors in Harberger's original analysis, dramatically reducing the size of the corporate tax's welfare cost. He then expanded the model from two to twelve industries, increasing the welfare cost of the tax. On balance, Shoven's estimates of the welfare costs of the corporate tax ranged between 0.75 percent and 1.5 percent of consumption. Fullerton, et al. obtained a similar estimate of the welfare cost of the distortion in the allocation of real resources under the corporate tax.⁶¹

These studies differ in several respects, but share a common feature. They all use average effective tax rates to measure the distortions of the corporate income tax. Average effective tax rates are measured for existing assets by taking the ratio of the observed tax payments from the existing stock of capital to the income generated by that stock. While such rates may be useful for many purposes, they can be crude representations of the effect of taxes on investment incentives. For example, they can include tax revenue from lump-sum features of the tax system, from investments made under tax systems no longer in existence, from unexpectedly profitable investments, or from pure monopoly profits. In addition, as an empirical matter, they bear little resemblance to the theoretically preferable concept of marginal effective tax rates.⁶²

A better measure of the effect of taxes on investment incentives is the marginal effective tax rate (or, equivalently, the cost of capital), which relates to incentives for incremental uses of capital. The marginal effective tax rate is calculated using information on expected financing sources, economic depreciation rates, inflation rates, required rates of return, statutory tax rates, depreciation allowances, and credits. It represents taxes that business enterprises would expect to pay on an additional unit of new investment that is just profitable at the margin. Thus, in contrast to the average effective tax rate, it relates closely to the forward-looking nature of a business

enterprise's investment decisions. Although such calculation cannot include every detail of the tax code, marginal effective tax rates dominate average effective tax rates as a measure of the incentive to invest.

Studies using marginal effective tax rates have found smaller welfare costs for tax distortions in the allocation of real capital than those using average effective tax rates. For example, Fullerton and Henderson adopt this approach and find that eliminating all differences in the taxation of corporate and noncorporate investments would produce a very small annual economic welfare gain, equivalent to about 0.007 percent of expanded national income (national income plus labor), or roughly 0.014 percent of consumption.⁶³ They find that eliminating all intersectoral tax distortions, including those between corporate and noncorporate capital and between business and housing capital, would produce larger gains. Depending on the assumed ease with which capital can migrate across sectors, these annual gains range from 0.039 percent of consumption when such migration is relatively difficult to 0.35 percent of consumption when such migration is relatively easy. For a unitary elasticity of substitution between corporate and noncorporate capital (as assumed in the augmented Harberger calculations above), the annual gain is roughly equivalent to 0.11 percent of consumption.

Fullerton and Henderson obtain these relatively small gains in part because, at the margin, debt finance and favorable individual level taxation of capital gains on corporate stock eliminate much of the tax disadvantage to investment in the corporate sector.⁶⁴ In addition, Fullerton and Henderson's calculations are based on the new view of dividend taxes, which magnifies the benefit of the favorable taxation of capital gains on corporate share appreciation, thereby reducing the welfare cost of the current tax system. Even under the traditional view adopted in this Report, the Fullerton-Henderson estimates of the welfare costs of the corporate tax based on marginal effective tax rates are likely to remain small compared to earlier estimates. Finally, in all calculations, Fullerton and Henderson hold

constant the overall average effective tax rate for the economy as a whole. Since the tax changes they consider would otherwise reduce revenue, their estimated welfare gains are smaller than those resulting from lump-sum replacement taxes.

In both the augmented Harberger model and the MPM used in this Report, we have adopted a marginal approach to measuring investment incentives, and so obtain results that are more comparable to those of Fullerton and Henderson than to the early results of Harberger and Shoven. For a variety of reasons, however, one would not expect identical results in the two models. For one thing, in several key respects, the modeling assumptions used in the augmented Harberger model differ from those in Fullerton and Henderson.⁶⁵ In addition, Fullerton and Henderson analyze tax policy changes starting from 1985 law, while this Report analyzes tax policy changes starting from current law. Fullerton and Henderson also hold constant the revenue from capital income taxes by directly adjusting the cost of capital, while we maintain revenue neutrality by using lump-sum taxes or by adjusting statutory tax rates. Finally, this Report studies integration prototypes that differ substantially from the hypothetical effective tax rate equalization policies considered by Fullerton and Henderson. Thus, one might expect that the results presented in this Report should be similar, though not equivalent, to those presented in Fullerton and Henderson, if financing distortions are ignored.

That is indeed the case, especially for the calculations based on the scaled tax replacement mechanism. For the integration prototypes studied in this Report, the augmented Harberger model simulates annual welfare gains from improved consumption choices ranging from 0.07 to 0.17 percent of consumption when financial distortions are ignored, and from 0.08 to 0.20 percent of consumption when financial distortions are captured. The most similar calculation in Fullerton and Henderson yields a 0.11 percent gain for complete elimination of intersectoral tax distortions, the same order of magnitude as results presented in this Report. In part because they

adopt the new view of dividends, however, they estimate smaller welfare gains from eliminating the corporate-noncorporate tax differential.

The allocational gains in the MPM used in this Report are substantially larger than most of those obtained by Fullerton and Henderson; in the scaled-tax-rate calculations, the annual gains range from 0.22 percent to 0.43 percent of consumption. Despite the use of marginal effective tax rates, these gains are almost as large as those obtained by Harberger and Shoven. The primary reason for the MPM's relatively large welfare gain is the greater substitutability of capital and other resources between the corporate and noncorporate sector of each industry. As a result, even small tax differences can reduce economic efficiency. Thus, the MPM calculations can be compared most fruitfully to the upper range of the Fullerton-Henderson calculations. Both sets of calculations assume significant substitutability of resources across sectors, thereby yielding large welfare gains associated with reforms at this margin.

Consider now the size of the gains from improved corporate debt policy. In the scaled-tax-rate calculations, the augmented Harberger model used in this Report produces annual gains ranging from negligible improvements under some prototypes to 0.17 percent of consumption for CBIT, while the modified MPM yields annual gains ranging from -0.22 percent of consumption for the distribution-related prototypes to 0.23 percent of consumption for CBIT. These gains from improved corporate borrowing decisions appear smaller than those estimated by others.⁶⁶ Several factors account for this Report's somewhat smaller gain. One is that not all the integration prototypes eliminate debt's tax advantage over equity, while earlier studies considered complete elimination of debt's tax advantage. Second, our scaled-tax-rate calculations significantly reduce gains from improved financial choices by raising the difference between the statutory corporate tax rate and the tax rate on interest income for nonCBIT prototypes. No such effect would be found in earlier studies that implicitly used lump-sum replacement taxes or that assumed that integration

would eliminate debt's tax advantage. Third, earlier studies assumed that corporate debt would decline to zero, absent a tax advantage, while this Report recognizes potential nontax benefits of debt so even without a tax advantage corporations would continue to finance a substantial portion (30 percent) of their capital investments with debt. Thus, there is a much larger scope for improvement from eliminating or reducing the tax advantage of debt in the earlier studies than in the models used in this Report.

Finally, increases in economic well-being accompanying integration are similar to those estimated using CGE models for the Tax Reform Act of 1986. For example, using lump-sum replacement taxes, Gravelle (1989) estimated that the 1986 Act would generate annual welfare gains ranging from 0.08 to 2.00 percent of consumption. Also using lump-sum replacement taxes, Fullerton, Henderson, and Mackie (1987) estimated that annual welfare changes attributed to the 1986 Act would range from -0.30 to 0.89 percent of consumption. In their calculations most similar to those in this Report, they estimated an annual welfare gain equivalent to 0.37 percent of consumption. The annual welfare gains presented in this Report are therefore on the same order of magnitude as estimates for the 1986 Act.⁶⁷

Integration in an International Context

Although the models described in the preceding sections differ in many respects, they all ignore international trade and capital flows and treat the United States as if it were a closed economy. Closed economy effects of tax policies may be modified in important ways in an open economy. For example, in a closed economy, a successful saving incentive might be expected to lower the cost of capital and increase domestic investment. In contrast, in a small, open economy much of the incremental saving might flow abroad, leaving the domestic capital stock largely unaffected. It is desirable in principle, therefore, to analyze the integration prototypes using a model incorporating international capital mobility. Such a model, which is presented in the next section, permits analysis of effects of tax changes

on holdings of debt and equity by U.S. and non-U.S. investors.

Economists have analyzed the degree to which capital is internationally mobile, but there is no consensus.⁶⁸ Also important in the study of integration is the relative mobility of debt and equity capital, since the integration prototypes examined in this Report affect returns from debt and equity investments differently.⁶⁹ While there is controversy over the extent of mobility of debt and equity capital, this Report analyzes some possible consequences of the integration prototypes on capital flows. The effects of integration proposals on foreign investment in the United States, U.S. investment abroad, the components of the balance of payments, and the U.S. domestic capital stock are examined using an open economy model. While the Report offers some tentative conclusions based on the model results regarding possible net effects of integration-related changes in incentives in an open economy setting, more research is needed before reaching firm conclusions.

A Model of Taxation and International Capital Mobility

Introducing trade and capital flows complicates significantly the analysis of corporate taxation. As a consequence, economic models of international corporate flows typically embody a much simpler representation of the domestic economy than the closed economy models described above. This Report uses a model of trade and capital flows between the United States and an aggregate of all other countries, viewed as a single foreign country.⁷⁰ While such a representation is stylized, it offers an indication of the likely importance of internationally mobile debt and equity capital for assessing economic effects of integration.

In the model, each country has four production sectors: import-competing goods (from the U.S. perspective), equipment (producers' durables, such as machines and airplanes), non-equipment export goods, and nontraded goods and services. Consumers in each country can choose

between the consumption of domestic and imported traded goods depending on relative prices.

Residents of each country allocate wealth among four assets: domestic debt, foreign debt, domestic equity, and foreign equity. The allocation depends on real after-tax rates of return. Foreign and domestic debt are assumed to be closer substitutes than foreign and domestic equity, and, thus, international holdings of debt are much more responsive to changes in relative returns. Business enterprises in each country choose the mix of debt and equity to supply depending on market interest rates and equity returns, and on the tax treatment of these payments at the corporate level. The international model thus has features in common with the portfolio allocation model presented above.

The model takes into account the relationship among the three major components of the U.S. balance of payments: the balance of merchandise and services trade, the balance of capital inflows and outflows, and the balance of receipts and payments of investment income on cross-border holdings. One possibility is an increase in imports relative to exports in the long run, and a resulting fall in the output of the import-competing sector.

The different tax treatment of resident and nonresident investors also plays an important role in the model. For example, under current law, foreign investors in U.S. equity are subject to the U.S. corporate level tax but not to the investor level taxes imposed on a U.S. resident. They pay only withholding taxes on dividends and these are very low on average because of treaty relief. Similarly, portfolio interest paid to foreigners is exempt from U.S. tax under current law. To the extent that integration prototypes alter the relative tax treatment of foreign and resident investors, they can lead to a reallocation of internationally mobile capital among countries.

Three integration prototypes are modeled explicitly: the shareholder allocation prototype and the two distribution-related prototypes. While potential effects of CBIT are discussed, there is no explicit modeling of the prototype due to the

significant uncertainty surrounding the relative substitutability of U.S. exempt and taxable debt in the portfolios of U.S. and non-U.S. investors. As before, two means of financing revenue costs of integration are presented: lump-sum taxes and scaled-rate replacement taxes on capital income. Table 13.11 presents the percentage change in the U.S. and foreign capital stock, cross-border holdings of debt and equity, and after-tax returns. In addition, the three rows at the bottom of the table present the absolute (constant) dollar changes (constrained to sum to zero) in trade, capital flows, and net international investment income. As with the closed economy models, simulation results refer to effects of integration prototypes on economic variables in the long run.

Foreign Holdings of U.S. Capital

The shareholder allocation prototype encourages foreign investors to reduce holdings of U.S. equity and increase holdings of U.S. debt. Pre-tax returns for foreign investors in U.S. equity, who concentrate their holdings in the U.S. corporate sector, decline as a result of the shift of capital into the corporate sector by U.S. residents. Because they would be denied the credit for the corporate level withholding tax, their after-tax returns decline as well. Accordingly, there is a decline in foreign investment in U.S. equity. The magnitude of the decline, of course, depends more generally on how responsive foreigners are to such price changes. With respect to debt, the shareholder allocation prototype raises slightly the U.S. interest rate because of the competition from newly desirable equity. Foreign holdings of U.S. debt increase as a result. The overall effect on foreign holdings of U.S. capital depends on the relative mobility of debt and equity capital. In the simulations reported here, equity holdings fall, while debt holdings increase. Nonetheless, since debt is assumed to be more internationally mobile than equity,⁷¹ total foreign investment in the U.S. increases.

The distribution-related prototypes have a similar effect on incentives for foreign investment in the United States. Foreign holdings of U.S. equity decline, while holdings of U.S. debt

increase. Because the separate corporate tax is maintained, however, corporations deduct interest at a higher rate than under the shareholder allocation prototype. Thus, the U.S. interest rate is higher and incentives for foreigners to shift into U.S. debt are larger. The calculations presented in Table 13.11 suggest that distribution-related prototypes increase (slightly) foreign investment in the United States. As with the shareholder allocation prototype, the change in the composition of foreign investment is more significant than the change in its total amount.

We do not model CBIT's effect on foreign investment in the United States. CBIT would shift the tax on business interest from the lender to the borrower. As a consequence, the market interest rate on business debt would fall below its current level. Since non-U.S. investors receive no credit for the tax that the borrower has paid on interest, their net return from U.S. lending would fall, giving them an incentive to shift out of business debt. To the extent that domestic investors shift capital into the corporate sector and, thereby, lower the pre-tax rate of return in that sector, foreign investors would have an incentive to reduce their holdings of U.S. equity. However, under CBIT, substantial amounts of government and home mortgage debt are taxed identically as under current law, offering pre-tax interest rates. Foreign investors may shift out of corporate bonds (and equity) and into these nonCBIT debt instruments, thereby mitigating any outflow of capital that might otherwise occur.

U.S. Holdings of Foreign Capital

The shareholder allocation prototype reduces incentives for U.S. taxpayers to hold foreign debt, and increases the incentive to hold foreign equity. For U.S. taxpayers, the shareholder allocation prototype raises the after-tax return to domestic investment. The after-tax return on domestic equity rises because of relief from the corporate tax, and the after-tax return on domestic debt rises because of the likely increase in U.S. interest rates. Consequently, foreign debt is less attractive relative to both domestic debt and domestic equity. Foreign equity is more attractive for U.S.

Table 13.11
General Equilibrium Results: International Model
Projected Long-Run Effects of Tax Integration Alternatives

	Shareholder Allocation		Dividend Credit		Dividend Exclusion	
	Financed by		Financed by		Financed by	
	Lump Sum Tax	Tax on All Capital	Lump Sum Tax	Tax on All Capital	Lump Sum Tax	Tax on All Capital
Percentage Changes						
U.S. Capital Stock	.6	1.9	1.2	2.7	.9	1.5
Rest of the World Capital Stock	-.3	-1.2	-.6	-1.3	-.4	-.9
U.S. Holdings of Foreign Debt	-10.9	-26.0	-11.9	-24.6	-9.2	-17.6
U.S. Holdings of Foreign Equity	10.6	43.7	10.7	30.2	8.6	24.8
Foreign Holdings of U.S. Debt	7.5	31.8	10.4	28.4	7.7	17.9
Foreign Holdings of U.S. Equity	-24.1	-46.3	-17.1	-30.3	-12.9	-24.6
After-tax Return to U.S. Equity (U.S. Residents)	20.1	1.8	13.7	7.7	10.1	2.6
After-tax Return to U.S. Equity (Rest of the World Residents)	-13.8	-28.3	-8.2	-15.2	-6.1	-12.4
U.S. Interest Rate	.8	3.3	1.6	3.8	1.2	2.5
After-tax Real U.S. Interest Rate (U.S. Residents)	2.0	-18.0	3.8	-6.9	2.8	-6.5
Return to Foreign Equity (Rest of the World Residents)	.3	.1	.3	.4	.2	.2
Return to Foreign Debt (Rest of the World Residents)	.4	1.1	.6	1.2	.4	.8
Absolute Changes (in \$ billions, 1988 base)						
Change in Annual Net Capital Flows	-1.5	-.8	1.4	4.5	1.0	1.4
Change in Net Trade Balance	-20.7	-48.8	-12.8	-25.6	-9.6	-21.7
Change in Net Receipts of Investment Income	22.2	49.6	11.4	21.1	81.6	20.3

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Note: Simulations assume all U.S. debt is exempt under CBIT. See discussion in text.

investors because foreign tax credits are passed through to U.S. shareholders.

Distribution-related integration also reduces incentives for U.S. investors to hold foreign debt. In contrast to the shareholder allocation prototype, however, distribution-related integration has an uncertain effect on incentives for U.S. investors to hold foreign equity. Under an imputation credit system, the dividends earned from equity investments overseas are not entitled to a credit to offset corporate level taxes, while dividends from domestic equity investments do receive such a credit. To the extent that this constraint limits the typical U.S. multinational's ability to attach credits to dividends from foreign source income, there is a tax incentive for U.S. investors to

switch out of foreign equity and into U.S. equity (and possibly debt). On the other hand, in practice, the typical U.S. multinational is likely to have a pool of available credits sufficiently large to attach a credit to dividends ultimately attributable to marginal investment income from abroad. As a result, U.S. investors might enjoy the benefits of integration on their foreign equity holdings, so an increase in these investments might occur. An imputation credit system, thus, would have an ambiguous effect on total U.S. holdings of foreign assets. Debt holdings decline and equity holdings rise. Because of the greater international mobility of debt assumed in the simulations and the greater weight of debt in holdings of foreign assets, however, total U.S. investment overseas declines slightly.

The projected effects of the dividend exclusion prototypes are similar in character to the imputation credit, but somewhat smaller in magnitude because dividend exclusion provides a smaller benefit to U.S. equity investors. Under the dividend exclusion prototype, dividends originating from overseas investments are not eligible for exemption at the shareholder level. As in the case of the imputation credit system, the simulations in Table 13.11 assume that this limitation does not seriously restrict the typical U.S. multinational company's ability to pay excludable dividends. As a result, U.S. holdings of foreign equity are projected to increase. U.S. investment in foreign debt declines because of the rise in U.S. interest rates.

CBIT would be unlikely to change substantially the incentives for U.S. investors to hold foreign equity, but might reduce substantially incentives for them to hold foreign debt. In part because foreigners might shift out of U.S. debt, an increase in the after-tax return available to U.S. investors on U.S. debt could accompany CBIT. The higher return available domestically would offer an incentive for U.S. investors to shift out of foreign debt and into U.S. debt. The extent of the rise in the after-tax interest rate available to U.S. residents, however, is uncertain because the extent to which foreign investors would switch out of U.S. debt is uncertain.

Components of the Balance of Payments

This section discusses each prototype's effects on the three major components of the balance of payments: net capital flows, net trade balance, and net receipt of investment income. These three components must balance (sum to zero) so a tax law change cannot affect just one; the other components must show an offsetting adjustment.

Shareholder allocation and distribution-related prototypes have similar effects on the balance of payments in the model. Both would leave net capital flows largely unchanged. As the discussion above suggests, there is uncertainty about the size of the portfolio shifts that the prototypes would

cause. Nonetheless, our results suggest that offsetting changes in incentives produce a small net effect on capital flows. The calculations indicate that on balance these prototypes lead to a very small change in the flow of capital into the United States. Both prototypes reduce net payments of investment income to foreigners. This effect arises primarily because of the decline in the pre-tax return on U.S. equity. Both prototypes reduce the net trade balance. With capital flows largely unchanged and reduced net investment income paid to foreigners, the trade balance must fall, so the overall balance sums to zero.

Ascertaining effects of CBIT are again difficult. By reducing incentives for foreigners to hold CBIT debt, CBIT could encourage some flow of capital out of CBIT debt. Foreigners would likely shift their U.S. investment out of corporate bonds into nonCBIT government and home mortgage debt, however. The combination of a possible capital outflow under CBIT and the lower pre-tax returns available to foreigners on some of their U.S. investments implies that net payments of investment income to foreigners would fall, or U.S. net receipts rise. To the extent that CBIT shifts capital out of the United States, but raises U.S. net receipts of investment income, CBIT would have an ambiguous effect on the trade balance.

Domestic U.S. Capital Stock

Each prototype's effect on the domestic capital stock depends on its effect on net capital flows, combined with its effect on saving out of changes in real income. Both shareholder allocation and distribution-related integration have a small, positive effect on the flow of capital into the United States in the model. These prototypes also increase U.S. real income as a result of efficiency gains from reduced net payments of investment income to foreigners. Consequently, these prototypes increase very modestly the U.S. capital stock. We have not attempted to model formally effects of CBIT on the size of the U.S. domestic capital stock.

13.G DISTRIBUTIONAL EFFECTS OF INTEGRATION

Incidence of the Corporate Tax: Theoretical Predictions

Like most taxes, the corporate income tax alters the distribution of real income of individuals. This section discusses the evidence relating to who bears the burden of the corporate tax and issues to be resolved in analyzing distributional effects of integration.

Issues

A basic principle underlying proposals for integration is that because corporations are owned by shareholders, corporations have no taxpaying ability independent of their shareholders. Corporations pay taxes out of the incomes of their shareholders.⁷² The economic burden of a tax, however, frequently does not rest with the person or business who has the statutory liability for paying the tax to the government. This burden, or incidence, of a tax refers to the change in real incomes that results from the imposition of a change in a tax. Importantly, the burden of the corporate tax may not fall on shareholders. A corporate tax change could induce responses that would alter other forms of income as well. For example, some of the burden may be shifted to workers through lower wages, to consumers of corporate products through higher prices, to owners of noncorporate capital through lower rates of return on their investments, or to landowners through lower rents. This shifting might not happen quickly, so the short-run incidence could well differ from the long-run incidence.

Tax policy analysts have long been concerned with the incidence of the corporate tax.⁷³ Although there is no unanimous view, the most frequent finding is that, while shareholders are likely to bear the burden of the tax in the short run, much of the tax is probably shifted to owners of all capital in the long run. Some further shifting onto labor or consumers also may be possible, however, under certain circumstances.

The Basic Harberger Model

An early incidence analysis was offered by Harberger.⁷⁴

Suppose that investors always allocate capital so as to equalize its net return at the margin across sectors. Consider the imposition of an extra tax on corporate capital, starting from an equilibrium in which net rates of return are equalized. The immediate effect is to lower the net rate of return in the corporate sector by the amount of the tax. In the short run, therefore, the tax is borne by corporate shareholders. Over time, however, capital begins to shift out of the corporate sector as investors seek the higher (after-tax) rates of return available in the noncorporate sector. As capital moves into the noncorporate sector, its pre-tax rate of return in that sector falls, while the pre-tax return in the corporate sector rises. The migration of capital stops only when the pre-tax returns change enough that the after-tax rate of return in the corporate sector equals the rate of return in the noncorporate sector. Although the tax is levied only on corporate capital, noncorporate capital also suffers from the tax in the long run; owners of noncorporate capital receive a lower net rate of return. Indeed, Harberger found that under reasonable assumptions, the burden of the corporate income tax is borne equally by owners of all capital.

As in any model, the outcome depends on initial assumptions. Much attention in the academic literature has been given to the consequences of changing various assumptions.⁷⁵ For example, if the marginal investment is financed by debt, the burden of the tax may fall on corporate shareholders.⁷⁶

Incidence in a Dynamic Economy

In principle, the incidence of the corporate tax in a dynamic economy can be quite different from the Harberger approach, in which the supply of capital is fixed. Intuitively, to the extent that the corporate tax (and taxes on capital income generally) reduces saving, the capital stock can

diminish, thereby decreasing wage rates and shifting the burden to labor.

Analyzing this point is difficult, however. In addition to addressing the controversy over the size of the sensitivity of saving to changes in the net return, one must specify an increase in some other tax to compensate for eliminating the corporate tax. For example, in a life-cycle context, financing the elimination of the corporate tax by increasing taxes on individual income could increase or decrease the capital stock and income. (There are offsetting effects here, since the redistribution of income from younger high-savers to older low-savers would reduce the incentive effects of the tax.)

While the response of savings to the elimination of the corporate tax (holding total income taxes constant) is likely to be relatively small, there are important distributional effects across individuals within a generation with different mixes of labor and capital income and across generations.

Incidence in an Open Economy

Many authors have suggested that the incidence of the corporate tax can be dramatically different from Harberger's early closed economy analysis.⁷⁷ With frictionless international capital markets for securities and real investment, a small, open economy is a price-taker in international capital markets. Imposing a corporate tax in such an economy would cause capital to flow abroad until net rates of return are once again equalized internationally. To the extent that labor cannot emigrate, the incidence of the tax falls on domestic labor.

While correct, this argument is likely to have limited applicability to an analysis of the incidence of the corporate tax in the United States. First, the United States is not a small, open economy; it owns approximately 30 percent of the worldwide capital stock. Second, world capital-market integration, in practice, is substantially less than complete, particularly for equity capital.⁷⁸ As a result, even if capital is mobile

internationally, owners of domestic capital could be expected to bear a significant portion of the long-run burden of the tax.⁷⁹

Summary

While there is no firm agreement on the incidence of the corporate income tax, the literature suggests the following assumptions on which distributional analyses are conventionally based: (1) the short-run incidence falls on owners of corporate stock in proportion to their corporate income or (2) the long-run burden falls either completely on owners of all capital, or partly on owners of capital and partly on workers.⁸⁰

Assessing Distributional Impacts of Integration Prototypes

Distribution of Effective Tax Rates

The preceding discussion highlights the importance of assumptions about incidence for analyzing long-run distributional effects of corporate tax integration. Effects of integration on the distribution of the tax burden also depend on how integration would be financed (discussed below). Tables 13.12 and 13.13 summarize the distributional consequences of the dividend exclusion, imputation credit, shareholder allocation, and CBIT integration prototypes, consistent with our revenue estimates (see Section 13.H) and the incidence assumptions discussed above. The tables describe the long-run distribution of tax burdens as measured by effective tax rates relative to current law, after taxpayers have adjusted their behavior in response to the new regimes. The calculations represent the combined effects of changes in individual and corporate taxes, as well as changes in fiduciary, employment, and excise taxes.⁸¹

For each prototype, the estimated effective tax rates in Table 13.12 reflect our preferred assumption about the long-run incidence of the corporate tax, that the tax burden is borne by the owners of all capital. Table 13.13 shows for each prototype the estimated effective tax rates under the alternative assumption that the corporate income tax is

Table 13.12
Effective Tax Rates on Individuals:
Current Law and Integration Prototypes
Standard Incidence Assumption¹

Family Economic Income (\$1000s)	Current Law: (1991)		Dividend Exclusion		Imputation Credit		Shareholder Allocation		CBIT: No Tax on CBIT Capital Gains		CBIT: with Tax on CBIT Capital Gains	
	Share of Total		With		With		With		With		With	
	Taxes Paid	Effective Tax Rate	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²
(Taxes as Percentages of Income)												
0- 10	0.009	10.1	10.0	10.2	10.0	10.2	10.0	10.4	10.5	10.4	10.6	10.1
10- 20	0.037	13.0	12.9	13.1	12.8	13.0	12.8	13.3	13.5	13.5	13.8	13.1
20- 30	0.061	16.3	16.2	16.3	16.0	16.2	16.0	16.5	16.8	16.7	17.1	16.4
30- 50	0.155	19.1	18.9	19.1	18.8	19.0	18.7	19.2	19.5	19.4	19.8	19.2
50- 75	0.202	20.8	20.6	20.7	20.6	20.8	20.4	20.9	21.3	21.2	21.6	21.1
75-100	0.162	22.3	22.0	22.1	22.0	22.2	21.8	22.2	22.8	22.8	23.1	22.6
100-200	0.191	23.8	23.2	23.5	23.4	23.7	22.6	23.3	23.9	23.8	24.6	23.8
over 200	0.183	24.1	23.9	24.4	23.8	24.3	22.1	23.5	22.9	22.8	26.0	24.5
Total Individual	1.000	20.9	20.6	20.8	20.5	20.8	20.1	20.7	20.9	20.9	21.8	21.0

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¹Corporate income tax assumed to be borne 100% by capital income.²Capital tax change imposed to offset change in revenue from prototype. Capital tax assumed to be distributed uniformly across all capital income.

Table 13.13
Effective Tax Rates on Individuals:
Current Law and Integration Prototypes
Alternative Incidence Assumption¹

Family Economic Income (\$1000s)	Current Law: (1991)		Dividend Exclusion		Imputation Credit		Shareholder Allocation		CBIT: No Tax on CBIT Capital Gains		CBIT: with Tax on CBIT Capital Gains	
	Share of Total		With		With		With		With		With	
	Taxes Paid	Effective Tax Rate	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²	Prototype Alone	Capital Tax ²
(Taxes as Percentages of Income)												
0- 10	0.009	10.6	10.6	10.8	10.6	10.9	10.6	11.2	11.3	11.2	11.5	10.8
10- 20	0.038	13.3	13.3	13.5	13.2	13.4	13.2	13.9	14.0	14.0	14.3	13.5
20- 30	0.062	16.6	16.5	16.7	16.3	16.6	16.3	17.0	17.3	17.2	17.6	16.8
30- 50	0.156	19.5	19.3	19.5	19.1	19.4	19.1	19.7	20.0	20.0	20.3	19.6
50- 75	0.205	21.3	21.1	21.3	21.1	21.3	20.9	21.5	22.0	21.9	22.3	21.6
75-100	0.164	22.7	22.4	22.6	22.4	22.7	22.2	22.8	23.4	23.4	23.8	23.1
100-200	0.190	23.8	23.3	23.6	23.5	23.8	22.7	23.5	23.9	23.9	24.7	23.9
over 200	0.176	23.4	23.1	23.4	23.0	23.4	21.3	22.4	21.5	21.4	24.5	23.3
Total Individual	1.000	21.0	20.7	21.0	20.7	21.0	20.2	21.0	21.1	21.0	22.0	21.1

Department of the Treasury

Office of Tax Policy

¹Corporate income taxes assumed to be borne 50% by labor, 50% by capital income.²Capital tax change imposed to offset change in revenue from prototype. Capital tax assumed to be distributed uniformly across all capital income.

borne half by capital income and half by labor income.

The tables classify individuals according to their Family Economic Income (FEI). FEI is a broad concept of income that attempts to capture family income from all sources, taxed and untaxed, in the current year. The concept is designed to place families into income classes with others about equally well off, with those in higher income groups considered consistently better off than those in lower income groups.⁸²

When we presented estimates of integration on economic efficiency earlier in the chapter, we incorporated explicitly the requirement that revenues lost as a result of integration be compensated by offsetting tax increases. These we considered as replacement taxes lump-sum taxes and uniform increases in taxes on capital income. Since lump-sum taxes are not available to policymakers, we present distributional information in Tables 13.12 and 13.13 assuming that tax rates on capital income are increased to finance integration.

Dividend Exclusion

The dividend exclusion prototype would reduce total revenues when fully phased in (see Section 13.H). All FEI groups would receive a slight reduction in effective tax rates. With the capital tax replacement, there would be very small differences in the effective tax rates under current law and the dividend exclusion prototype (including a slight increase in the effective tax rate for the highest income group). Hence, the efficiency gains made possible by this integration prototype (see Section 13.F) could be obtained with no loss in revenue and with only slight changes in the distribution of tax burdens across income groups. This conclusion holds irrespective of underlying assumptions regarding the long-run incidence of the corporate tax (compare Tables 13.12 and 13.13).

Imputation Credit

The distributional consequences of the imputation credit prototype are qualitatively similar to

those for dividend exclusion under both incidence assumptions. The imputation credit prototype, described in Chapter 11, would lose revenue when fully phased in. The revenue neutral version of the prototype decreases the reduction in effective tax rates for upper income groups, with a tax increase for the highest FEI group (with FEI exceeding \$200,000 per year).

Shareholder Allocation

The third column of calculations in Tables 13.12 and 13.13 presents the distribution of effective tax rates under the shareholder allocation prototype. There would be a significant annual revenue loss under shareholder allocation when fully phased in (see Section 13.H), leading to reductions in effective tax rates larger than under the distribution-related integration proposals, particularly for the top two income groups (with FEI of at least \$100,000 per year). With an offsetting uniform increase in tax rates on capital income to finance the revenue loss, tax reductions for upper-income taxpayers are attenuated, with slight overall increases in tax burdens for middle-income groups.

CBIT

Unlike the other integration prototypes considered in this Report, CBIT would not lose revenue. When fully phased in, the CBIT prototype would raise a small amount of revenue with no taxation of capital gains from the sale of CBIT assets, and a substantial amount of revenue with current law treatment of capital gains (see Section 13.H). In the former case, the revenue neutral version amounts to a very small tax increase for lower- and middle-income groups and a reduction in the effective tax rate for the highest income group. The reduction for the highest FEI group more reflects the distributional implications of the elimination of the capital gains tax on the sale of CBIT assets than the characteristics of CBIT as an integration prototype. To see this, note that the revenue neutral version of CBIT with current law treatment of capital gains has only very small impacts on effective tax rates relative to current law. These patterns of effective tax rates are

qualitatively similar under the two incidence assumptions we considered.

13.H REVENUE ESTIMATES FOR INTEGRATION PROTOTYPES

This section presents revenue estimates for integration prototypes. Below we discuss: the revenue estimating procedures and the assumptions behind the revenue estimates, long-run revenue estimates for each prototype, and revenue estimates for a 5 year budget period under the assumption that the proposals would be adopted effective January 1, 1992, and phased in over a 5 year period. While the prototypes are not legislative proposals and we do not contemplate that any would be proposed with so early an effective date, 5 year estimates based on the economic assumptions used to estimate other items in the Fiscal Year 1992 Federal budget are useful to permit comparison with other proposals.

Procedures and Assumptions

We prepared revenue estimates for the integration prototypes using the Individual Income Tax Model and the Corporate Income Tax Model of the Office of Tax Policy. These models are based on large samples of individual and corporate tax returns. Detailed computer programs are used to calculate tax liabilities and simulate changes in tax law provisions.

Earlier in this chapter, we examined economic effects of the adoption of the prototype integration proposals. The revenue estimates presented in this section are dynamic. That is, the revenue estimates use the changes in economic variables predicted by a computable general equilibrium model to adjust the levels of various components of income and deductions on the tax models. Among the important economic changes incorporated in the estimates for corporations are changes in dividend payout rates, debt to equity ratios, the share of capital in the corporate sector, and rates of return to capital in the corporate sector. Among the important changes in individual taxpayer behavior taken into account are those in

levels of interest and dividend income, income from non-corporate businesses (sole proprietorships, partnerships, farms, and small business corporations), capital gains realizations, and interest deductions. Changes in interest rates affect the income and deductions of both corporations and individuals. The effects of the proposals on the incentives of foreigners and tax-exempt institutions to hold different types of assets in their portfolios are taken into account.

Following the standard convention of revenue estimates produced by the Office of Tax Policy, Gross National Product (GNP) and the overall inflation rate are assumed to be unchanged as a result of the adoption of the prototypes.⁸³ Interest rates, relative prices, and the allocation of resources among sectors of the economy do change depending on the expected economic effects of the prototype. The allowance for changes in interest rates is not strictly in accord with conventional revenue estimating procedures because of the nature of the proposals estimated. The integration proposals are more likely to affect relative interest rates paid on different types of assets than tax changes commonly estimated. In particular, the significant changes introduced by some of the prototypes make it important to consider changes in interest rates.

An important additional assumption for the revenue estimates is that tax provisions other than those included in the proposal remain the same as under current law. An actual legislative proposal would include other changes which could affect the estimates presented here.

Effects of Integration on Federal Tax Revenue

We estimated fully phased-in revenue effects for each of the prototypes (at the 1991 level of real GNP) incorporating behavioral changes that would occur in the long run. These behavioral changes are those which would be expected to occur after the economy has fully adjusted to the new tax regime. While these estimates are not necessarily correct for the short run or the 5 year

budget period, they are important for understanding the long-run effects of the integration prototypes.

Dividend Exclusion

The dividend exclusion prototype taxes corporate income (defined as under current law) at a rate of 34 percent. Dividends paid out of taxed corporate income, i.e., those qualified by an Excludable Distributions Account (EDA) as described in Section 2.B, are not taxed at the individual level.⁸⁴ The amount added to the EDA is based on U.S. corporate taxes paid.⁸⁵ This excludes foreign taxes paid to the extent that they offset domestic taxes through the foreign tax credit.⁸⁶ Capital gains from the sale of corporate shares are treated the same as under current law. Outbound foreign investment is basically treated the same as under current law. For inbound investment, the withholding tax on dividends paid to foreigners is maintained.

The basic principle of the dividend exclusion prototype is to reduce the double tax on distributed corporate income. We estimate that when fully phased in, integration through dividend exclusion loses \$13.1 billion annually at 1991 levels of income.

Dynamic changes in the economy would increase corporate income tax receipts under the dividend exclusion prototype. Increases in corporate tax receipts would result from the incentive to shift corporate financing from debt to equity. The reduction in corporate borrowing would decrease corporate interest deductions. Induced changes in interest rates also would affect corporate interest deductions and therefore affect corporate tax revenues. The increases in corporate tax revenues would be slightly more than offset by the decrease in individual income tax receipts from the dividend exclusion. The dividend exclusion, thus, provides incentives for corporations to increase excluded dividends. In closely-held corporations, the incentive under current law to pay out profits as managerial wages or interest would be largely

eliminated, and there would therefore be some substitution of dividends for wages and interest payments to owners.

CBIT

The CBIT prototype for integration extends the logic of the dividend exclusion prototype to debt. Neither interest nor dividend payments would be deductible at the corporate level, but both interest and dividend payments from CBIT entities generally would be excludable at the investor level. The entity level CBIT tax rate of 31 percent would apply to both corporate and noncorporate businesses (except for small businesses, which would be taxed as under current law). Unlike interest on CBIT debt, home mortgage interest would continue to be deductible by the borrower and taxable to the lender, as under current law. Interest on U.S. Government debt would be taxable to the recipient. Interest tax-exempt under current law would remain tax-exempt to recipients under CBIT. We considered two alternative assumptions for the taxation of capital gains on CBIT assets: (1) no taxation of capital gains on CBIT assets and (2) current law treatment of capital gains on CBIT assets.

In contrast to the other integration prototypes, the CBIT prototype would increase tax receipts relative to those under current law. Once the behavioral changes are fully accounted for, the annual increase in revenues would be \$3.2 billion with no taxation of capital gains on CBIT assets and \$41.5 billion with current law treatment of capital gains. While overall tax receipts would be increased under the CBIT prototype, individual tax payments would be substantially reduced because dividends, noncorporate business income, most interest and some capital gains would no longer be taxable to individual recipients. The reduction in individual income tax receipts reflects the taxation of capital income at the entity level. Noncorporate entities subject to CBIT would now be taxed at the 31 percent CBIT rate. Much of this income is currently taxed under the individual income tax.

Shareholder Allocation

The shareholder allocation prototype approximates passthrough integration more closely than the dividend exclusion or CBIT prototypes. The prototype would retain a corporate tax rate of 34 percent. Taxable shareholders would receive a 31 percent credit for corporate level taxes paid, while tax-exempt and foreign shareholders would receive no credit. The credit would accompany the allocation of corporate income to the shareholder. Intercompany dividends would be granted a full dividends-received deduction in lieu of a credit. Under this prototype, corporate income tax is taxed at the individual level as part of corporate income rather than as a separate income item. Capital gains on corporate stock due to retained earnings would not be taxed, since undistributed corporate income would increase shareholders' basis. Increases in corporate stock values from other sources would be taxed as under current law. For outbound investment, the foreign tax credit would be passed through at the taxable investor's rate. For inbound investment, the withholding tax on dividends paid to foreign investors would be retained.

Because shareholder allocation integration would extend distribution-related integration to retained earnings and shareholders would not be taxed on untaxed corporate preference income, it would lose significantly more revenue than would the dividend exclusion prototype. We estimate that when fully phased in, shareholder allocation integration would lose \$36.8 billion annually at 1991 levels of income.

Most of the revenue loss would be in the individual income tax. While taxable income of individuals would be increased substantially by including all corporate income (rather than just dividends received), this would be more than offset by the revenue loss from the credit for corporate taxes paid. For taxpayers in the 31 percent tax bracket, the tax on the additional income and the credit for corporate taxes paid

would offset each other and leave taxes approximately unchanged. For taxpayers in lower tax brackets, however, the additional corporate income subject to tax would be taxed at a lower rate than the credit. For example, taxpayers in the 15 percent bracket would be taxed at 15 percent on the additional income but receive a credit at a 31 percent rate. For lower tax bracket taxpayers, the corporate credit can be used to offset taxes against wages and other income.

The other major factor in the large revenue loss from the shareholder allocation prototype is the basis adjustment for corporate stock. Shareholders' basis would rise to reflect income already taxed at the corporate level, and so revenues from the taxation of capital gains on sales of stock would be reduced.

Corporate tax receipts would increase, since dynamic behavioral changes (including the expansion of the corporate sector) are taken into account. As with distribution-related integration, the increase in corporate tax receipts results primarily from the reduction in corporate debt and therefore in interest deductions.

Imputation Credit System

The final prototype we considered is distribution-related integration through an imputation credit system. Under this prototype, corporate taxes paid are credited to a shareholder credit account (SCA). Individual shareholders report dividends grossed-up (by one divided by one minus 0.31) to reflect corporate taxes paid and receive a credit for corporate taxes paid. The prototype calculates the credit and gross-up factor at the top individual 31 percent tax rate rather than the top 34 percent corporate tax rate to limit the credit to no more than the individual income tax paid by individuals in the highest tax bracket. We estimate that accomplishing distribution-related integration through an imputation credit system would generate a fully phased-in revenue loss of \$14.6 billion per year.

APPENDICES

APPENDIX A: THE CORPORATE INCOME TAX IN THE UNITED STATES

A.1 BRIEF DESCRIPTION OF THE CORPORATE INCOME TAX

The corporate income tax originally was enacted in 1909 as an excise tax on the privilege of doing business in the corporate form. An individual income tax on dividend income was enacted in 1916.

The Corporate Income Tax Base

Corporations are generally taxed at a 34 percent marginal rate on their taxable income. To compute taxable income, a corporation deducts from gross income business expenses paid or incurred during the taxable year. These expenses include employee compensation, state and local taxes, depreciation, and interest expense, but not dividends paid. When deductions exceed income, a corporation has a net operating loss (NOL). Corporations generally can carry back net operating losses to offset taxable income for the 3 preceding years and can carry forward any remaining net operating loss to offset taxable income for 15 years.

Like individuals, corporations generally include gains on appreciated assets in income (and deduct losses on depreciated assets from income) only when the assets are sold or otherwise disposed of (when the gains or losses are realized). Corporations may deduct capital losses only against capital gains, and unused capital losses may be carried back for 3 years and forward for 5 years.

Because the double tax on corporate earnings distributed to shareholders might become a triple or quadruple tax if corporations were taxed in full on dividends received from other corporations, a

corporate shareholder is entitled to a full or partial dividends received deduction (DRD), depending on its percentage ownership of the distributing corporation.

U.S. corporations are subject to tax on foreign as well as domestic income. Although a U.S. corporation is required to pay U.S. tax currently on foreign income earned through a foreign branch, U.S. tax is generally not imposed on earnings of a foreign subsidiary until the subsidiary distributes its income to the parent corporation as a dividend. In computing U.S. tax liability, U.S. taxpayers (including corporations) are allowed a credit for foreign taxes paid, subject to certain restrictions. See Chapter 7.

In addition to these general rules, special rules apply to specific types of businesses that conduct activity in corporate form, such as financial institutions and insurance companies. Other special rules apply to specific types of activities, such as the exploration, development, and production of natural resources. Certain types of corporations are granted full or partial relief from corporate level tax.

Tax Rates

Corporations are subject to tax at a rate of 15 percent on the first \$50,000 of taxable income, 25 percent on the next \$25,000 of taxable income, and 34 percent on taxable income above \$75,000. The marginal rate on a corporation's taxable income between \$100,000 and \$335,000 is increased by 5 percent to phase out the benefit of the graduated rate structure. Thus, corporations with incomes in the phaseout range pay tax at a marginal rate of 39 percent. Corporations with taxable incomes in excess of \$335,000 pay tax at

a flat 34 percent rate. In 1989, over 90 percent of corporate taxable income was taxed at the 34 percent rate.

Corporations also are subject to an alternative minimum tax (AMT). Corporations pay AMT only if their minimum tax liability exceeds their regular tax liability. A corporation's AMT base is its taxable income, adjusted to eliminate the benefit of certain deferrals of income, accelerations of deductions, and permanent exclusions. The resulting amount, alternative minimum taxable income (AMTI), is reduced by an exemption amount and is taxed at a 20 percent rate. The basic exemption amount is \$40,000, which is reduced by 25 percent of the amount by which AMTI exceeds \$150,000. A corporation's minimum tax liability can generally be credited against future regular tax liability.

Entities Subject to the Corporate Tax

A business entity is taxable as a corporation if it is organized as a corporation under state law. In addition, Treasury Regulations treat an unincorporated entity as a corporation if it has more corporate characteristics than noncorporate characteristics. The four relevant corporate characteristics are: (1) continuity of life, (2) centralization of management, (3) limitation of liability for debts to property of the entity, and (4) free transferability of interests.¹ Certain partnerships also are treated as corporations if their interests are traded on an established securities market or are readily tradable on a secondary market (or its equivalent) and the partnership is not engaged in a qualifying passive activity.²

Subchapter C refers to the provisions of the Code that apply to most corporations. In 1958, Congress enacted Subchapter S of the Code to enable certain corporations to elect exemption from the corporate level tax. S corporations, like partnerships, are generally treated like conduits for tax purposes. The income of S corporations is taxed directly to their shareholders. To qualify for this passthrough treatment, a corporation must have no more than 35 shareholders and only one class of stock, and all of its shareholders must be

individuals who are U.S. citizens or residents or certain trusts and estates. There also are restrictions on an S corporation's affiliations with other corporations.

In addition to S corporations, other entities that meet certain restrictions on assets, type of business, and distributions to shareholders qualify as conduits for all or a portion of their income. A regulated investment company (RIC), a mutual fund that makes diversified investments for its shareholders, pays no tax on amounts distributed to its shareholders if it distributes currently at least 90 percent of its dividend and interest income and meets certain other conditions.³ A real estate investment trust (REIT), a corporation or association that specializes in investments in real estate and real estate mortgages, also may receive passthrough treatment if it meets certain conditions designed to ensure that its assets and income are primarily related to real estate.⁴ A real estate mortgage investment conduit (REMIC), an entity that holds a fixed pool of mortgages and issues multiple classes of interests to investors, also qualifies for passthrough treatment.⁵ Qualified distributions to members of cooperative organizations also are taxed directly to the members and are not taxed at the entity level.

Treatment of Debt and Equity

Under present law, the tax treatment of the returns to an investor in a corporation depends upon whether an investment is considered debt or equity. A corporation generally can deduct interest on corporate debt.⁶ Consequently, corporate earnings paid to debtholders as interest bear no tax at the corporate level. In contrast, because dividends are not deductible, corporate tax must be paid on the earnings attributable to equity investments, regardless of whether the earnings are retained or distributed.

Individual debtholders are taxed on interest income when received or accrued, in accordance with their method of accounting. Individuals are taxed on corporate income when the income is distributed to them as dividends.⁷ Increases in the value of corporate stock held by individuals,

whether due to retained earnings, appreciation of the corporation's assets, or other factors, are generally not taxed until the stock is sold.⁸ Such gains are generally capital gains. Individuals also may not deduct losses on corporate stock until the stock is sold. Such losses are generally capital losses and may be deducted without limitation against capital gains. However, capital losses in excess of capital gains also may be used to offset only \$3,000 of an individual's ordinary income per year, with any excess carried forward indefinitely.

Corporate debtholders also pay tax on interest income when received or accrued, in accordance with their method of accounting. A corporate shareholder must include all dividends in income but can deduct a portion of dividends received from other domestic corporations. The deduction for dividends received is 70 percent if the recipient corporation owns less than 20 percent of the stock of the payor, and 80 percent if the recipient corporation owns between 20 percent and 80 percent of the stock of the payor.⁹ Intercompany dividends among members of affiliated groups (each 80 percent or more owned, directly or indirectly, by a common parent) are generally fully deductible by the recipient. Thus, the maximum rate of tax on dividends received by corporate shareholders is generally 10.2 percent (30 percent of dividends received multiplied by the 34 percent corporate tax rate). Corporate capital gains are currently taxed at the same rate as ordinary income, and capital losses may offset capital gains, but not ordinary income, with a 3 year carryback and 5 year carryforward.

Although debt and equity are treated very differently by the tax system, distinguishing debt from equity is not straightforward. In 1969, Congress authorized the Department of the Treasury to issue regulations to determine whether an interest in a corporation should be treated as stock or debt for tax purposes. Congress suggested that Treasury consider the following factors in making this determination: (1) the existence of a written unconditional promise to pay on demand or on a specified date a sum certain in money at a fixed

rate of interest, (2) whether the instrument is subordinated to or has preference over any debt of the corporation, (3) the issuer's debt to equity ratio, (4) whether the instrument is convertible into stock, and (5) the relationship between holdings of the issuer's stock and holdings of the instrument in question.¹⁰

Although Treasury issued three drafts of regulations attempting to distinguish debt from equity, the task of devising simple, workable rules for distinguishing between debt and equity proved elusive. Ultimately, Treasury withdrew all of these regulations.

In the absence of regulations, taxpayers and the IRS look to judicial opinions and IRS rulings to determine whether an instrument will be treated as debt or equity for tax purposes. In addition to the factors listed in the 1969 statute, the following factors have been considered relevant: (1) the holder's rights upon default, (2) the equity features of the instrument, such as voting rights or participation in earnings, (3) whether the corporation has sufficient projected cash flow to service the debt, (4) whether the holder has management rights, and (5) whether the holder acts like a reasonable creditor in protecting its rights.

To summarize, it has not proved possible to develop simple and acceptable guidelines for distinguishing between debt and equity. As financial markets become more flexible and innovative, that task becomes more difficult. The administrative complexity and compliance costs associated with making the debt-equity distinction are serious problems in the current system of corporate taxation.

Cross-Border Investment

The tax treatment of cross-border investment is discussed in Chapter 7.

Tax-Exempt Organizations

The treatment of tax-exempt organizations is discussed in Chapter 6.

A.2 OVERVIEW OF U.S. CORPORATE TAX RECEIPTS

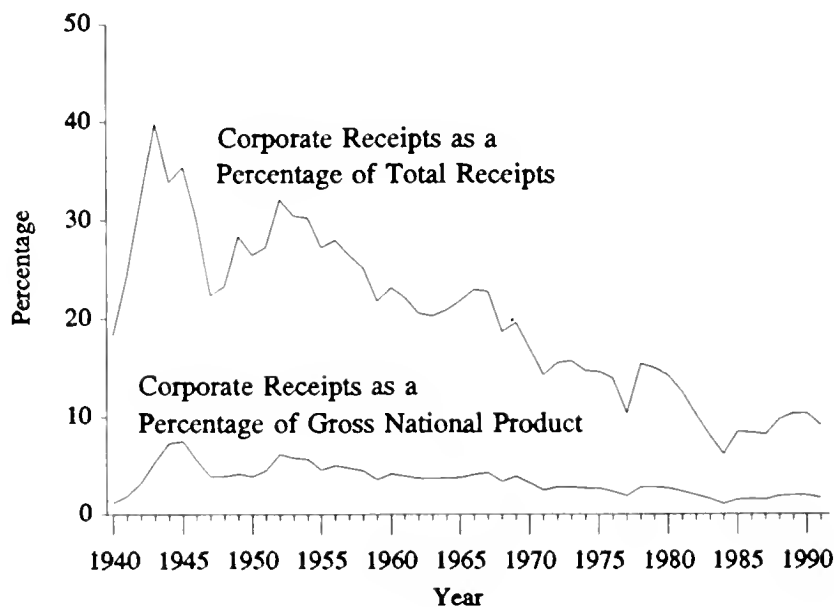
In 1990, the corporate tax generated Federal revenues of \$93.5 billion. Federal corporate tax receipts have generally increased over the past 40 years, but when adjusted for inflation, they have fallen since the late 1960s. In constant 1982 dollars, corporate tax receipts averaged \$85 billion per year in the 1950s, \$86 billion per year in the 1960s, \$77 billion per year in the 1970s, and \$56 billion per year from 1980 to 1986. Since 1986, real corporate tax receipts have averaged \$76 billion per year in 1982 dollars. From the 1950s to 1986, corporate receipts also fell as a percentage of Federal budget receipts and of gross national product (GNP). See Figure A.1. Since 1986, however, the decline in the relative importance of the corporate tax has stopped and may have reversed. From 1987 through 1990, corporate receipts averaged 9.9 percent of total Federal budget receipts, above the average of 8.9 percent for the rest of the 1980s, but less than the 1970s average of 15.0 percent. From 1987 to 1990, estimated tax liabilities for nonfinancial corporations, relative to GNP or gross domestic product, also slightly exceeded the average for the early 1980s.

The Tax Reform Act of 1986 (the 1986 Act) adopted base-broadening measures designed to increase the overall level of corporate taxes, although it reduced the maximum marginal corporate tax rate from 46 percent to 34 percent. The base broadening was accomplished primarily by repealing the investment tax credit, limiting depreciation deductions, restricting the use of net operating losses, strengthening the corporate alternative minimum tax, repealing the *General Utilities* doctrine, and adopting significant changes in accounting rules,

for example, rules requiring uniform capitalization of certain expenditures. As anticipated, the 1986 Act increased corporate income tax receipts (and lowered individual income tax receipts) as a percentage of total income tax receipts. The percentage of income tax receipts accounted for by corporate taxes increased from 15 percent in 1986 to 19 percent in 1989 and dropped back to 17 percent in 1990. The percentage of income tax receipts accounted for by individual income taxes fell from 85 percent to 81 percent, rising to 83 percent in 1990. Current estimates indicate that the 1986 Act increased corporate income tax receipts by approximately \$130 billion from 1987 to 1991.

The level of corporate tax receipts depends heavily on economic conditions. When the U.S. economy is growing, corporate profits are strong, and corporate tax receipts increase, but when the economy is in recession, corporate profits tend to fall, and corporate taxes decrease. During the recession of the early 1980s, for example, corporate taxes as a percentage of total budget receipts fell from 10.2 percent in 1981 to 6.2 percent in 1983. This decline was mostly

Figure A.1
Corporate Receipts as a Percentage of
Total Receipts and Gross National Product
1940-1991



attributable to the a decline in pre-tax corporate profits, from \$202 billion in 1981 to an average of \$178 billion in 1982 and 1983.

Foreign countries have a wide variety of tax systems, which make it difficult to compare directly corporate tax burdens across countries, but some general observations can be made. In 1988, corporate income taxes accounted for an average of 8 percent of total income tax receipts for the 22 countries in the OECD. The average in 1988 was the same as in 1980. Although U.S.

corporate income taxes were 8 percent of total tax receipts in 1988, the same as the average for the 22 OECD countries, the U.S. percentage is expected to be higher in subsequent years if current trends continue. Countries with percentages higher than the OECD average in 1988 include Japan at 24 percent, the United Kingdom at 11 percent, and Italy at 9 percent; countries with percentages below the OECD average include Germany at 5 percent, France at 5 percent, and Switzerland at 7 percent.¹¹

APPENDIX B: EXPERIENCE OF OTHER COUNTRIES WITH DISTRIBUTION-RELATED INTEGRATION SYSTEMS

This appendix briefly describes the distribution-related integrated systems of six of the United States' major trading partners.¹ The Australian and New Zealand imputation credit systems most closely resemble the prototype discussed in Chapter 11. The United Kingdom system is a prominent example of a compensatory tax system. This appendix also discusses the Canadian, French and German distribution-related systems. This appendix does not describe the Japanese corporate tax system, because in 1989 Japan replaced its split rate tax system with a classical system.

B.1 AUSTRALIA

Introduction

Australia's imputation credit system became effective July 1, 1987. Major changes to related tax laws have subsequently taken effect, most notably:

- a reduction in the top corporate rate from 49 percent to 39 percent,
- the imposition of a 15 percent tax on the investment income of pension plans, and the extension to them of the imputation credit (at the full rate of 39 percent), and
- the exemption of most foreign income from the corporate tax base.

Description of Mechanics

Imputation Credits

Australia's imputation credit system makes imputation credits available to taxable shareholders (including pension plans) for distributions from the corporation's franking account. Imputation credits provide full relief from the corporate level tax paid with respect to distributed income. Distributions not paid from the franking account are considered to be paid from preference income and are taxed to the shareholder without gross-up and without credit.

The shareholder receives an imputation credit equal to the amount of distributions from the franking account (franked distributions), grossed-up at the corporate rate (currently, 39 percent), and then multiplied by that rate.² The shareholder includes this amount in his income and receives a credit in the same amount against his personal tax liability. Imputation credits generally are not refundable.

The balance in the franking account represents the portion of the corporation's after-tax income that, in effect, has been taxed fully (taxed at the corporate rate). In general, the franking account balance derives from the amount of tax the corporation pays. At the current tax rate of 39 percent, for every AU\$39 the corporation pays in tax, it adds AU\$61 to the balance of the account. The calculation converts after-tax corporate income that is taxed at various rates into an equivalent combination of fully-taxed and fully exempt amounts.³ Thus, Australia's system accords shareholders relief only from corporate level tax actually paid with respect to distributed income, and distributed preference income is subject to tax at the shareholder level.

An Australian corporation must make entries in its franking account throughout the year upon the occurrence of specified events in the assessment, payment, and adjustment of tax. The franking account is credited when the corporation: carries forward a franking surplus from the previous year, pays tax, receives franked dividends from another company, is served with a determination reducing the amount of a "franking deficit tax offset," or has an "estimated debit determination" (see "Allocating Credits to Dividends," below) that lapses or substitutes a new estimated debit determination.

The franking account is debited when the corporation: pays franked dividends, has tax refunded, is served with a determination (or increase) of a franking deficit tax offset, receives

(or is deemed to receive) notice of an estimated debit determination, e.g., appeals a tax assessment, makes on-market share buybacks; or underfranks a dividend (franks it by less than the required franking amount, if the required franking amount is 10 percent or more of the dividend).

Compensatory or Withholding Tax

The Australian system does not have a compensatory or withholding tax on distributions.

Dividends Defined, Bonus Shares, Share Repurchases

In general, dividends include all non-liquidating distributions of money or other property to shareholders out of profits (under corporate law, the corporation cannot pay dividends as a return of capital without a court order). Liquidating distributions generally are deemed to be dividends to the extent they represent profits.

A corporation can issue bonus shares as a mechanism for extending the imputation system to retained earnings. An issue of bonus shares distributed to a shareholder is treated as a dividend unless it is paid out of the corporation's share premium account (which represents amounts paid on issuance of shares in excess of par value). Thus, if the corporation has a sufficient balance in its share premium account, it can choose the tax treatment of the bonus issue by choosing whether or not to debit the account, subject to certain rules for dividend-streaming arrangements. See "Streaming" below.

The tax treatment of a share repurchase (or "buyback") differs depending upon whether the transaction is an "on-market" or an "off-market" purchase. An on-market buyback occurs in the ordinary course of business on an official exchange; an off-market buyback (a buyback by an unlisted company or by a listed company not in the ordinary course) occurs otherwise.

An off-market buyback is treated as a dividend to the extent it exceeds paid-up capital for the shares (share capital plus the amount, if any,

allocated to the buyback from the share premium account). With respect to the dividend portion, the corporation debits its franking account as required under the general rules and the shareholder receives the imputation credit. The shareholder's basis in his stock is irrelevant for dividend purposes but is relevant for the portion treated as return of paid-up capital, so the shareholder could have a dividend and a capital gain or loss on the same transaction.

An on-market buyback is treated as a capital transaction to the shareholder (because he does not know that his buyer is the corporation). The corporation has no gain, loss, or deductions. However, the corporation must treat the buyback as a dividend to the extent it would be a dividend if it were off-market and, with respect to such amount, must debit its franking account under the allocation rules. See "Allocating Credits to Dividends," below. (This notional dividend also might affect any provisional required franking amount for any actual frankable dividend.) No imputation credit is available to the shareholder to offset his capital gain.⁴

Allocating Credits to Dividends

Australia has adopted allocation rules generally designed to assure that a corporation pays dividends first out of the franking account, and to prevent corporations from streaming franked dividends to resident shareholders, who can use imputation credits, and unfranked dividends to foreign shareholders (and tax-exempt shareholders), who cannot. The allocation rules impose a minimum "required franking amount" for a dividend and provide for adjustments and sometimes penalties if a dividend is overfranked or underfranked by more than a de minimis amount.

The required franking amount ideally franks all dividends paid during the year to the extent of the corporation's after-tax income. To ensure that the corporation does not underfrank a dividend, the rules require the company: (1) to take into account all dividends to be paid on the same day, that have been declared but not yet paid, or that the corporation is committed to pay later in the

same year (a committed future dividend), such as dividends on preferred stock, in allocating franking credits to a given dividend, (2) to frank a dividend that was a committed future dividend at least to the same extent as the earlier dividend, and (3) to frank a dividend at least to the same extent as any other dividend on the same day.⁵ These rules do not, however, prevent a corporation from franking an earlier dividend on one class of stock at one rate and franking a later dividend on another class of stock at a lower rate where the corporation was not committed to pay the later dividend or where the later dividend is paid in the succeeding year. An upper limit on franking is set by reference to the corporate tax rate; at current rates, a dividend of AU\$61 can carry no more than AU\$39 of imputation credits.

The required franking amount could range from zero, for a corporation with no taxable income, to 39 percent of the dividend, for a corporation with sufficient after-tax income. However, the required franking amount might not be readily determinable when a dividend is distributed during the year, where it is not clear whether the corporation will have sufficient taxable income for that year. The situation also could be complicated by later events, such as a refund of previously paid tax. If, for such a reason, a year-end deficit were to result, the corporation would be subject to a franking deficit tax and possibly a penalty tax. An estimated debit determination is a procedure for resolving this problem; if the corporation expects such a later debit, so the dividends paid would turn out to have been overfranked, the corporation may notify the tax authorities and make an anticipatory debit to its franking account.

If a corporation underfranks a dividend (and if the required franking amount is 10 percent or more of the dividend), the corporation must debit its franking account to the extent of the underfranking. Thus, the corporation is treated as having franked the dividends to the required amount, but the shareholders forfeit the imputation credit attributable to the underfranking.

Where overfranked dividends (or other adjustments) result in a deficit in the franking account at the end of the year, the corporation must pay a franking deficit tax. The franking deficit tax is the amount of tax sufficient to restore the franking account to zero.⁶ This tax does not result in a positive credit to the franking account, because it functions as a prepayment of corporate tax prematurely imputed to shareholders by the payment of overfranked dividends. The franking deficit tax is not a penalty, and therefore a corporation may offset a payment of franking deficit tax against its future tax liability. However, to discourage more than de minimis overfranking, a penalty equal to 30 percent of the franking deficit tax is payable where the franking deficit exceeds 10 percent of the total of the franking credits arising during the year and any dividend paid during the year was overfranked.

Tax Rates

The corporate tax rate currently is 39 percent. Marginal tax rates for individuals range from 0 percent to 47 percent. The 47 percent rate applies to taxpayers with taxable income exceeding AU\$50,000. Capital gains on assets acquired after September 19, 1985 are taxed at ordinary income rates. However, to determine the amount of gain recognized on disposition of a capital asset, basis in the asset is indexed for inflation if the asset was held for more than 1 year.

Treatment of Preference Income

Dividends paid out of preference income (when the franking account balance is zero) are taxable when received by shareholders and thus corporate preferences are not extended to shareholders.

The Australian system currently provides corporations few preferences. In 1988 Australia reformed its depreciation system and other tax concessions. For example, depreciation rates for "plant" were based on 5 or 3 year lives; now they are based on effective lives (using a 150 percent

declining balance or "prime cost") plus a 20 percent "loading." The 150 percent deduction for research and development expenditures is scheduled to be scaled back to 125 percent in the mid-1990s.

Treatment of Domestic Intercorporate Dividends

Dividends received by an Australian corporation from another Australian corporation generally are free of tax because tax is rebated. In addition, credits attached to intercorporate dividends are credited to the recipient corporation's franking account. However, unfranked dividends to private corporations (generally, unlisted corporations) are taxed without refund. This exception is designed to prevent the use of private corporations to defer tax on distributed preference income. Australia does not permit consolidation of affiliated corporations for purposes of its imputation system (or for its corporate tax generally, although there is loss transfer for 100 percent related corporations).

Treatment of Foreign Source Income

Beginning July 1, 1990, foreign source income derived from comparable tax countries through a branch is generally excludable from corporate income. An exemption from corporate tax also applies to dividends received from a corporation resident in a comparable tax country if the Australian corporation owns at least a 10 percent interest in that corporation. Dividends received from portfolio investments (i.e., less than 10 percent) in corporations resident in comparable tax countries are taxable with a credit allowed for foreign withholding taxes. However, because foreign taxes paid with respect to foreign source income derived from comparable tax countries do not generate credits to the franking account, dividends paid by an Australian corporation out of such income do not carry credits in respect of such foreign taxes and are exposed to shareholder level tax. Thus, this foreign source corporate income is still double-taxed, once when earned in the foreign country and once when the after-foreign-tax amount is distributed to domestic individual shareholders.

Income derived from low-tax countries through a branch or a nonresident corporation generally is subject to full taxation at the corporate level with a credit for foreign taxes paid on such income. Where an Australian corporation owns a 10 percent or more interest in a corporation residing in, or deriving substantial income from, a low-tax country, the Australian corporation is taxed currently on its share of the nonresident corporation's income and may credit its share of foreign taxes paid by the nonresident corporation on an "accruals" basis, provided that the foreign corporation is a controlled foreign company (that is, 5 or fewer Australian residents control 50 percent or more of the company). Such a 10 percent shareholder maintains an "Attribution Tax Account" (ATA) for every entity in the chain, in which income is attributed to that entity; when a dividend is paid between entities, a debit is made to the ATA of the paying corporation and a credit is recorded in the ATA of the receiving corporation.⁷ Where the Australian corporation owns a lesser percentage, the accruals tax does not apply, but dividends received are subject to Australian tax (with a tax credit for foreign withholding taxes paid on the dividend). Because foreign taxes paid do not generate credits to the franking account, dividends paid out of such income to the shareholders of the Australian corporation are exposed to shareholder level tax. The net effect of this system is the equivalent of allowing a deduction for foreign taxes on distributed foreign source income earned through an Australian corporation.

Treatment of Tax-Exempt Shareholders

Excess imputation credits are not refundable to any shareholder, including tax-exempt shareholders. Accordingly, income taxed at the corporate level is subject to one level of tax even where it is distributed to tax-exempt shareholders.

Until 1988, pension funds were tax-exempt, although distributions were taxable to beneficiaries. The new statute imposes a tax at a 15 percent rate on the investment income of pension funds, but allows pension funds an imputation

credit for franked dividends at the full 39 percent rate. Thus, a pension fund can use the excess imputation credits (a 24 percent credit) to shelter the tax on a large amount of other investment income (such as interest, rents, royalties, foreign income, capital gains, and unfranked dividends). Pension funds also may utilize imputation credits to reduce tax imposed on contributions. These changes are designed in part to encourage pension funds to invest in domestic corporations having Australian tax liability, thus reducing the tax arbitrage gains to pension funds from investing in bonds or in corporations paying unfranked dividends.

Treatment of Foreign Shareholders

Australia generally imposes a withholding tax on dividends from Australian corporations to nonresident shareholders. No distinction is made between portfolio and nonportfolio investment. The normal withholding rate is 30 percent, but treaties may reduce this rate to 15 percent. The gross-up and imputation credit procedure does not apply to nonresident shareholders. However, the franked portion of a dividend is exempt from the withholding tax. Thus, the franked portion of a dividend bears Australian tax at the 39 percent corporate rate. Unfranked dividends are subject to withholding tax and, thus, bear Australian tax at the applicable withholding rate.

Treatment of Low-Bracket Shareholders

Although a shareholder may use excess credits to offset any other tax liability he may have, excess credits are not refundable. Unused credits may not be carried forward or back. The imputation credit (aggregated with other nonrefundable credits) is stacked so refunds from other sources cannot impair use of the credit.

Streaming

In addition to the allocation rules described above, Australia has adopted several anti-streaming provisions. First, where a dividend is paid to a corporate shareholder as part of a dividend

stripping operation, imputation credits attached to the dividend and the tax rebate for intercorporate dividends may be denied. One effect of the dividend stripping rule is to discourage sales of shares by tax-exempt or nonresident shareholders in anticipation of the payment of a franked dividend. Second, to inhibit streaming through partnerships and trusts, imputation credits received by a partnership or trust are generally allocated in accordance with a partner's or beneficiary's share of partnership or trust income. Third, a special debit to the franking account is required when a corporation distributes an unfranked dividend or tax-exempt bonus share to a shareholder in substitution for a franked dividend as part of a dividend streaming arrangement. Generally, the franking debit is calculated as if the franked dividend had been franked to the same extent as the dividend for which it substituted, thus ensuring equal franking for all dividends paid on a particular class of stock as part of the same distribution.

Treatment of Interest

Interest paid by an Australian corporation generally is deductible. Interest paid to a resident lender is includable in the lender's income. Interest paid to a foreign lender (whether or not resident in a treaty country) is subject to a 10 percent withholding tax. Australia has a thin capitalization rule that denies a resident corporation a deduction for interest paid to foreign shareholders where the foreign shareholders own at least 15 percent of the resident corporation and the resident corporation's debt to equity ratio with respect to the nonresident shareholders' investment is in greater than 3 to 1 (6 to 1 for financial institutions). Beginning July 1, 1990, this rule applies even if the foreign controlling shareholder is in turn controlled by Australian residents.

B.2 CANADA

Introduction

Canada introduced distribution-related integration in 1971 with the adoption of a straight credit system that grants a credit to resident individual Canadian shareholders with respect to dividends

received from Canadian corporations. The credit is not required to be funded at the corporate level. That is, the amount of the shareholder credit does not depend on the payment of tax by the corporation. Excess credits are not refundable.

Description of Mechanics

Credits

Where a Canadian resident individual shareholder receives a taxable dividend (described below) from a Canadian corporation, the shareholder grosses up the dividend by 25 percent (i.e., includes 125 percent of the dividend in income) and takes a credit against his Federal individual income tax for 66.7 percent of the amount of the gross-up. Provincial individual taxes are calculated as approximately 50 percent of the shareholder's Federal tax liability (after the reduction for the shareholder tax credit). Thus, the provincial tax is reduced by approximately 33.3 percent of the amount of the gross-up, and the total value of the shareholder credit against the combined Federal and provincial liability of the shareholder is approximately equal to the amount of the gross-up.⁸

The gross-up and credit are not dependent on the payment of Canadian tax at the corporate level. Thus, the shareholder credit may provide full or partial relief from corporate level tax, depending upon the tax rate applicable to the corporation paying the dividend. If no tax is paid at the corporate level, the shareholder credit completely or partially offsets the shareholder level tax, which is the only level of tax that would otherwise apply to the distributed income. For example, a dividend that is paid exclusively out of preference income would carry the full credit, the same as a dividend paid out of Canadian source sales income. In the former case, the corporation pays no Canadian corporate tax and, in the latter case, it pays a net Federal tax of more than 28 percent.

The degree to which the Canadian system integrates corporate and shareholder tax depends

on the rate at which distributed income has been taxed at the corporate level under the Federal and provincial tax systems. See "Tax Rates," below. Combining Federal and Ontario provincial tax, the system integrates 32 percent of a regular corporation's tax, 41 percent of a manufacturing corporation's tax, and 86 percent of a small business corporation's tax.⁹

Compensatory or Withholding Tax

Canada does not impose a compensatory or withholding tax on dividends to resident shareholders.

Dividends Defined, Bonus Shares, Share Repurchases

In general, a taxable dividend includes any nonliquidating distribution with respect to shares out of surplus funds. Accordingly, a return of contributed surplus that has not been converted into paid-up capital is a taxable dividend. A liquidating distribution constitutes a taxable dividend to the extent it exceeds paid-up capital (defined to exclude contributed surplus).

A stock dividend is generally treated as a taxable dividend. However, subject to certain exceptions, the amount of the dividend is limited to the increase in paid-up capital in respect of the stock dividend.

A share repurchase generally is treated as a taxable dividend to the extent that the amount paid exceeds the paid-up capital on the shares repurchased. The amount so treated is excluded in determining the shareholder's capital gain or loss. These rules, however, do not apply to a corporation's open market purchases of its shares.

Allocating Credits to Dividends

Because the shareholder credit is not dependent on the actual payment of corporate tax, the Canadian system does not require rules allocating credits to dividends.

Tax Rates

The Federal basic corporate rate is 38 percent. Provincial basic corporate rates generally range from 14 percent to 17 percent. However, an abatement of Federal corporate tax is allowed in respect of provincial tax equal to 10 percent of taxable income earned in a province. In addition, a surtax currently is imposed on corporations equal to 3 percent of a corporation's Federal tax liability. Thus, effective combined Federal and provincial corporate tax rates vary from 42.8 percent to 45.8 percent.

For individuals, Federal tax rates are 17 percent for taxable income up to \$28,784, 26 percent for taxable income of \$28,784 to \$57,578, and 29 percent for taxable income in excess of \$57,578.¹⁰ A Federal surtax of 5 percent is currently in place. Provincial tax is imposed as a percentage of Federal tax, varying from 46.5 percent to 62 percent. Some provinces impose a surtax on high-income individuals.

Corporate and individual taxpayers are taxed at ordinary income rates on 75 percent of their net capital gain in a taxable year. For individuals, a lifetime exemption of \$100,000 of gain applies. The lifetime exemption is \$500,000 for small business shares and farm property. For individuals, in addition to actual realized gain, gain is deemed to be realized with respect to many kinds of assets at death, at the time of transfer by gift or at the time the owner gives up Canadian residence.

Treatment of Preference Income

Because the shareholder credit is not dependent on the payment of tax at the corporate level, the Canadian system can be described as extending preferences to shareholders. However, because the Canadian system may provide less than 100 percent integration of the corporate and shareholder taxes on distributed income, the extension of preferences may be more than offset by the remaining double tax on taxable income. For example, for regular corporations the credit generally equals half of Federal corporate tax.

Thus, preferences are not extended to shareholders until preference income exceeds half of total corporate income.¹¹

A 5 percentage point reduction in the basic rate of corporate tax (from 38 percent to 33 percent) applies to manufacturing and processing income of a resident corporation. For Canadian small business corporations, a deduction applies that effectively reduces the basic rate by 16 percentage points (from 38 percent to 22 percent). Except for a 35 percent research and development credit, investment tax credits apply only in selected geographic areas. A more generalized investment tax credit was phased out in 1988 as part of tax reform. As discussed above, only 75 percent of net realized capital gains are included in income. Certain assets are eligible for accelerated depreciation.

Treatment of Domestic Intercorporate Dividends

The gross-up and shareholder credit mechanism does not apply to dividends paid by a Canadian corporation to a Canadian corporate shareholder. In general, however, domestic intercorporate dividends are deductible in computing the income of the Canadian shareholder corporation.¹² Thus, preferences generally are not recaptured when preference income is distributed to corporate shareholders. However, for Canadian portfolio dividends received by a private or privately-controlled Canadian corporation, a tax of 25 percent is payable by the recipient corporation and is refunded to the corporation when the dividends are redistributed to shareholders.

Treatment of Foreign Source Income

Resident corporations are taxed on their worldwide income. This includes current taxation on an accrual basis of passive income earned through a controlled foreign affiliate. However, Canada provides exemptions for certain types of foreign source income and a foreign tax credit with respect to certain other types of foreign source income. For example, dividends received from a foreign affiliate resident in a prescribed

country out of its active business income in that country or another prescribed country generally are exempt from Canadian corporate tax. Tax credits are allowed with respect to portfolio dividends received from a nonresident corporation, but not for underlying foreign taxes paid by that corporation on the income distributed. The effect of these exemptions and credits is to relieve, in whole or in part, corporate level Canadian tax on foreign source income. Because the shareholder credit does not depend on the extent to which the underlying corporate income has been taxed, the Canadian system extends the benefits of integration to foreign source income to the extent of the shareholder credit.

Treatment of Tax-Exempt Shareholders

Certain persons are excluded from Canadian tax, including charities and pension funds. However, because the shareholder credit is nonrefundable, tax-exempt shareholders do not receive the benefit of Canadian integration.

Treatment of Foreign Shareholders

The Canadian integration system generally is not extended to nonresident shareholders because the gross-up and shareholder credit mechanism does not apply to dividends paid to nonresident shareholders. Dividends paid to foreign shareholders are subject to a withholding tax at a statutory rate of 25 percent. By treaty, Canada typically reduces the rate to 10 percent for direct investment dividends and to 15 percent for portfolio dividends. The 1980 U.S. treaty, reflecting this policy, was the first in which Canada reduced its dividend withholding rate below 15 percent. This concession for direct investment dividends in the U.S. treaty was seen as extending to U.S. direct investors in Canadian corporations some of the benefit of Canadian integration.

Low-Bracket Shareholders

Excess shareholder credits are available to offset income tax liability with respect to other

income. Credits not used in the year received may not be refunded or carried forward.

Streaming

The Canadian system includes stop-loss rules that inhibit dividend stripping by requiring that, in certain circumstances, the amount of a loss recognized on a sale of shares be reduced by dividends received on the shares.

In addition, the gross-up and credit mechanism does not apply where a "dividend rental arrangement" exists. A dividend rental arrangement essentially is a transfer of shares where the transferee receives the dividend but the transferor retains the risk of loss and opportunity for gain with respect to the shares. Finally, under a general anti-abuse rule, Canadian tax authorities may deny a tax benefit where there is an avoidance transaction and a misuse of provisions of tax laws. An avoidance transaction is a transaction resulting in a tax benefit unless the transaction reasonably could be considered to have been undertaken primarily for non-tax reasons.

Treatment of Interest

Interest paid by a Canadian corporation is deductible if the interest relates to borrowed money used for the purpose of earning income from a business or property or for acquiring property for gain upon resale. A thin capitalization rule prohibits the deduction of interest paid by a thinly capitalized corporation to nonresident shareholders owning 25 percent or more of any class of the corporation's stock.

Interest income generally is taxable to resident lenders. A withholding tax generally is imposed on interest paid by Canadian corporations to nonresident lenders at the statutory rate of 25 percent. No withholding tax is imposed with respect to interest paid on corporate bonds or debentures to an arm's-length lender if no more than 25 percent of the principal amount is repayable within 5 years of issuance. In addition, the withholding rate may be reduced by treaty to 10 or 15 percent.

B.3 FRANCE

Introduction

The French distribution-related integration system combines three elements: (1) an imputation credit (avoir fiscal), (2) a compensatory tax (precompte mobilier), and (3) for 1989 through 1991, a "split" tax rate on corporate profits.

The avoir fiscal credit was enacted in 1965 and, simultaneously, a 24 percent withholding tax on dividends was repealed. The new system became fully effective in 1967.

In 1989, the French introduced a split rate system, which applies a higher tax rate to distributed profits. The split rate system was designed to provide an incentive for corporate financing through retained earnings and balance the incentive, created by the avoir fiscal, to distribute earnings and to finance through new equity capital. This system has been eliminated, however, beginning in 1992.

Description of Mechanics

Imputation Credits

Upon receipt of an eligible dividend (described below), a French resident individual or corporate shareholder is allowed a tax credit (the avoir fiscal) equal to 50 percent of the amount of the dividend, or 33.3 percent of the amount of the dividend plus the avoir fiscal. A shareholder must include in income both the amount of a dividend payment and the amount of the avoir fiscal.

The gross-up and avoir fiscal partially integrate corporate tax paid on distributed income. For 1991, distributed income is subject to a tax rate of 42 percent at the corporate level. The avoir fiscal, thus, equals 69 percent of the tax paid by the corporation on distributed income and 29 percent of the pre-tax amount of such income. For example, profits of F100 are subject to corporate tax of F42 prior to distribution, leaving a net amount for distribution of F58. A shareholder would include a total of F87 (F58 + F29) in

income. The avoir fiscal associated with this F87 dividend is F29. For 1992, distributed income will be subject to corporate level tax at the rate of 34 percent. The avoir fiscal will thus equal 97 percent of the tax paid by the corporation on distributed income and 33 percent of the pre-tax amount of such income.¹³

In order to encourage corporate distributions, the avoir fiscal is not allowed to shareholders in respect of dividends paid out of profits realized more than 5 years prior to distribution. In addition, the avoir fiscal is not available to foreign shareholders, unless specific provision is made in an income tax treaty. If the amount of the avoir fiscal exceeds the tax liability of an individual shareholder, the excess is refunded. The same is true for some tax-exempt shareholders. No refund is available to a corporate shareholder.

Split Rate Tax and Compensatory Tax (Precompte Mobilier)

The French split rate tax system, in effect for 1989 through 1991, is unusual in that it applies a higher tax rate to distributed profits than to retained profits. For fiscal years beginning on or after January 1, 1991 and before January 1, 1992, retained corporate profits are taxed at a rate of 34 percent, and distributed corporate profits are taxed at a higher rate of 42 percent. The additional 8 percent is imposed as a surtax in the year of distribution. The application of a higher tax rate to distributed profits was instituted for 1989 through 1991 to encourage corporate saving and investment. Taking into account the avoir fiscal credit allowed to shareholders, the effective corporate level tax rate on distributed taxable income is 13 percent for 1991. Consistent with recent corporate tax rate reductions in the United States and other EC countries, however, the French government recently eliminated the 8 percent surtax on distributed income.

The precompte mobilier is imposed on a distributing corporation in respect of dividends distributed (1) out of profits that have not borne regular corporate income tax at the 34 percent rate, e.g., foreign source income, preference

income, and dividends received by a parent company from a 10 percent owned subsidiary or (2) from fully-taxed profits earned more than 5 years before the distribution.¹⁴ The precompte mobilier is imposed at a rate of 50 percent of the amount of the dividend, or 33.3 percent of the dividend plus the precompte mobilier. Thus, the amount of the precompte mobilier is equal to the amount of the avoir fiscal associated with the dividend. No distinction is made in calculating precompte mobilier liability between income that is not taxed and income that is taxed at a rate lower than 34 percent.¹⁵

French corporations are required to segregate fully-taxed income from income potentially subject to the precompte mobilier for tax accounting purposes. In general, dividends eligible for avoir fiscal are deemed to be distributed first out of current fully-taxed income, and then out of fully-taxed retained income of each of the immediately preceding 5 years. Once fully-taxed income for this 5 year period has been exhausted, a corporation may choose to allocate a dividend distribution to (1) dividends received from foreign subsidiaries, (2) the long-term capital gains reserve, or (3) other miscellaneous preference income in any order. France thus allows stacking of dividends last against preference income.

A French corporation may elect, alternatively, to allocate part or all of a distribution eligible for the avoir fiscal first against dividends received from a French subsidiary within the last 5 years (rather than to current taxable income). Dividends received from French subsidiaries are subject, in principle, to the precompte mobilier. On redistribution, however, the avoir fiscal associated with such dividends may be credited against the precompte mobilier liability.

Dividends Defined, Bonus Shares, Share Repurchases

Distributions are eligible for the avoir fiscal if they are made from corporate income, are made pro rata to shareholders, and are based on a regular decision of the corporation. Repayments of share capital are not taxable, but payments to

shareholders are considered to be repayments of share capital only if all of the corporation's earnings and reserves previously have been distributed.

Distributions in liquidation are taxed as ordinary dividends to the extent the distribution exceeds the greater of contributed capital or share basis, and are eligible for the avoir fiscal. To the extent that liquidating distributions are deemed made from preference income, they are subject to the precompte mobilier.

Stock dividends generally are not subject to tax in the hands of a recipient. However, if the distribution of new shares is the result of a reinvestment of cash dividends at the election of the shareholder, the distribution is taxed as an ordinary dividend distribution.

Proceeds from share repurchases are treated as distributions, although only the difference between the value of consideration received and the shareholder's basis in the shares is subject to tax at the shareholder level. The amount distributed does not qualify for the avoir fiscal or trigger the precompte mobilier unless it is paid on a pro rata basis to all shareholders in accordance with a regular decision made by the corporation.

Allocation of Credits to Dividends

The avoir fiscal applies regardless of the rate of corporate level tax actually borne by distributed income.

Tax Rates

For the 1991 tax year, individual marginal income tax rates range from 5 percent to 56.8 percent. France also imposes a net wealth tax at rates, for 1991, ranging from 0.5 percent to 1.5 percent.

For fiscal years beginning on or after January 1, 1991 but before January 1, 1992, undistributed profits are taxed at a flat rate of 34 percent and distributed profits at a flat rate of 42 percent. The higher rate applicable to distributed profits

does not apply to profits distributed in the form of a stock dividend. For fiscal years beginning on or after January 1, 1992, all corporate profits (distributed and undistributed) will be taxed at a flat rate of 34 percent.

Net short-term capital gains (generally, gains on the sale of assets held less than 2 years) are included in taxable income and taxed at regular rates in the year realized (subject to certain exceptions that allow gains arising from mergers or similar reorganizations to be spread over periods from 5 to 15 years). Net short-term capital losses are either deductible from operating profits in the year realized or, for a loss corporation, added to the net operating loss (and thereby made available for 5 year carryforward or an elective 3 year carryback).

For dispositions occurring prior to July 1, 1991, net long-term capital gains generally are taxed at a rate of 25 percent. Long-term capital gains on property other than buildings, land and financial instruments are taxed at 19 percent and long-term capital gains on industrial property (e.g., patents) are taxed at 15 percent. Net long-term capital losses may not be used to offset operating profits, but may be carried forward for 10 years to offset future long-term capital gains. The after-tax amount of net long-term capital gain is credited to a special capital gain reserve. When a dividend is deemed distributed out of the capital gain reserve, a compensatory tax is imposed at a rate of 17 percent, equal to the difference between the long-term capital gains tax rate (25 percent) and the tax rate applicable to distributed profits (42 percent). For dispositions occurring on or after July 1, 1991, the French government has replaced the multiple rates on capital gains with a single 18 percent rate. Compensatory tax will thus be imposed at a rate of 16 percent for 1992, equal to the difference between 18 percent and the 34 percent rate applicable to distributed profits.

Treatment of Preference Income

Tax preferences available at the corporate level include special accelerated depreciation for new construction in depressed areas, shares in

certain building companies, software acquired from third parties, research installations, and air and water purification installations. Corporations also may be entitled to a tax credit for research and development expenditures, a tax holiday for start-up businesses, and a reduced rate of tax on French headquarters of multinational corporations.

Preferences are not passed through to shareholders, since the *precompte mobilier* is imposed on distributions of preference income. However, as described above, French law allows preference income to be stacked last.

Treatment of Domestic Intercorporate Dividends

Nonparent Companies

"Nonparent companies" are defined as companies that own less than 10 percent of the issued share capital of the distributing corporation. Nonparent companies are eligible for the *avoir fiscal*. Like an individual shareholder, a nonparent company must include in income the entire amount of a dividend received from another French company and may use the *avoir fiscal* associated with the dividend as a credit against its income tax liability. If, however, the nonparent company's income tax liability for the year in which a dividend is received is less than the amount of the *avoir fiscal*, no refund or carry-forward is allowed.

Parent Companies

"Parent companies" are defined as companies that own 10 percent or more of the shares of the distributing corporation. Parent companies are eligible for a "participation exemption" as well as the *avoir fiscal*. Under the participation exemption, 95 percent of the amount of a dividend received from a 10 percent-owned subsidiary (including the amount of the *avoir fiscal*) is excludable from taxable income.¹⁶

The *avoir fiscal* associated with dividends received by a parent company from its subsidiaries is passed on to the parent's shareholders when

the dividends are redistributed. In principle, the precompte mobilier applies to such redistribution, because the subsidiary dividends are almost entirely exempt from tax. The parent company is permitted a deduction, however, for the avoir fiscal associated with the subsidiary dividends and this deduction exactly offsets the parent's precompte mobilier liability. Any available credit for foreign withholding tax paid on the subsidiary dividends also may be used to offset the precompte mobilier. As a result, the shareholders of the parent company are placed in the same position as if they had owned shares in the subsidiaries directly.

Consolidated Groups

A French parent company may consolidate for tax purposes with its direct and indirect 95 percent-owned French subsidiaries. Dividends paid within the consolidated group are subject neither to precompte mobilier nor to corporate income tax.

Treatment of Foreign Source Income

In general, the French integration system does not extend the benefits of integration with respect to foreign income taxes imposed on foreign source income.

Profits earned by a French company through a foreign branch or other permanent establishment generally are excluded from taxable income until they are repatriated to France and distributed to shareholders. Upon distribution of these profits, the precompte mobilier is imposed. However, if a branch profits tax is imposed on the branch income in addition to foreign income tax, and provided the branch is located in a treaty country, the French corporation may credit the branch profits tax against the precompte mobilier.¹⁷

A French nonparent company is taxed on the net amount of a dividend received from a foreign corporation (after deduction of foreign withholding tax) resident in a nontreaty country and may not credit any foreign withholding tax against its corporate tax liability. Where the foreign

corporation is resident in a treaty country, the dividend is grossed up for any foreign withholding tax, which is then allowed as a credit against French corporate tax. Dividends paid by the nonparent company out of foreign source dividend income are subject to the precompte mobilier and qualify for the avoir fiscal.

Under the participation exemption, 95 percent of the amount of a dividend received by a French parent company from a 10 percent-owned foreign subsidiary (including the amount of the avoir fiscal) is excludable from taxable income. Foreign withholding tax is not allowed as a credit against French corporate tax on the foreign source dividend. The precompte mobilier is imposed on, and the avoir fiscal applies to, dividends paid by the French parent company out of foreign source dividends. However, where the foreign subsidiary is resident in a treaty country, the amount of the dividend received by the French parent company is grossed up by the amount of any foreign withholding tax, which may then be credited against the precompte mobilier due upon the redistribution of the foreign source dividend (provided the redistribution occurs within 5 years of the receipt of the foreign source dividend).

As of January 1, 1990, special rules apply to French holding companies. A French holding company is exempt from the precompte mobilier upon redistribution of dividend income received from foreign subsidiaries to its shareholders, if the holding company satisfies three requirements: (1) the exclusive purpose of the holding company is to hold shares in other companies, (2) at least two-thirds of the capital assets of the holding company consist of interests in foreign subsidiaries, and (3) the holding company derives at least two-thirds of its accounting profit (excluding capital gains) from such foreign interests. Generally, the French holding company must hold at least a 10 percent interest in a foreign subsidiary.

Dividends distributed by a qualifying French holding company out of dividends received from foreign subsidiaries are not eligible for the avoir fiscal, but give rise to a tax credit equal to any foreign withholding tax imposed on the foreign

subsidiary dividends. If such dividends are redistributed to a holding company shareholder residing in a nontreaty jurisdiction, the standard 25 percent withholding tax imposed on dividends is increased to 50 percent.¹⁸

Treatment of Tax-Exempt Shareholders

Pension funds, charities, and other tax-exempt organizations are not taxed on dividends received from French corporations, but are subject to tax at a reduced rate of 24 percent with respect to certain types of investment income, including dividends received from foreign corporations.

Tax-exempt organizations generally are not eligible for the *avoir fiscal*. However, retirement and disability benefit funds, as well as certain foundations and associations of "public utility," are granted a refundable *avoir fiscal* with respect to dividends received from French corporations.

Treatment of Foreign Shareholders

Dividends paid by a French company to a foreign shareholder are subject to French withholding tax at a rate of 25 percent, subject to reduction by treaty. The *avoir fiscal* is not generally available to foreign shareholders (whether individuals or corporations). This is the case even if a French corporation distributes income subject to, and pays, the *precompte mobilier*.

France has extended the *avoir fiscal* (by means of a cash refund) to shareholders of a French corporation who are resident in some treaty countries and who (1) are subject to income tax in their residence country on dividends received from the French corporation and (2) do not qualify for exemption or foreign tax credit relief in respect of deemed-paid foreign corporate taxes, i.e., individuals and corporate portfolio investors.

The *avoir fiscal* refund is subject to French withholding tax at a rate of 25 percent, subject to reduction by treaty. Under some treaties, 10 percent corporate shareholders (nonportfolio shareholders) and other nonresident shareholders

not entitled to the *avoir fiscal* refund are allowed a refund (subject to withholding tax) of any *precompte mobilier* imposed in respect of dividends received.

Under the United States treaty, for example, the *avoir fiscal* is refunded to shareholders who are either (1) United States resident individuals or (2) United States corporations that own less than 10 percent of the issued share capital of the distributing corporation and that do not qualify for the indirect foreign tax credit under IRC § 902 (corporate portfolio shareholders). The *avoir fiscal* is treated as an additional dividend amount and is subject to a 15 percent withholding tax. United States corporations that are 10 percent shareholders of the distributing corporation (non-portfolio shareholders) are not eligible for an *avoir fiscal* refund, but are entitled to a reduced 5 percent withholding rate on dividends and to a refund of the *precompte mobilier*.

Treatment of Low-Bracket Shareholders

The *avoir fiscal* is refundable to low-bracket shareholders.

Streaming

France does not have specific rules to prevent streaming, although the *avoir fiscal* is available only with respect to a distribution made *pro rata* to all shareholders.

Treatment of Interest

Interest paid to third parties who are not shareholders and who do not have legal or effective control over the payor is deductible at the corporate level.

Interest from corporate indebtedness is generally included in the taxable income of a resident lender (collected in part by withholding). Resident individuals holding certain fixed income securities may elect to have interest taxed at a flat rate collected by withholding. For 1991, the flat rate is 27 percent for income from bonds.

Interest from corporate indebtedness generally is subject to a withholding tax imposed at statutory rates from 25 percent to 51 percent. However, interest on bonds paid abroad is exempt. Reduced treaty rates also may apply.

B.4 GERMANY

Introduction

The German integration system has both a split rate tax and an imputation credit system with a compensatory tax. The split rate tax applies a "statutory" rate (currently 50 percent) to retained income and a lower "distribution" rate (currently 36 percent) to distributed income. The imputation credit mechanism imputes to shareholders the corporate level income tax paid on distributed income. In general, the shareholder receives a credit based on the distribution rate regardless of the corporation's actual tax liability. However, as discussed more fully below, the corporation may become liable for compensatory tax if it has not paid tax on distributed income at the full distribution rate.

Description of Mechanics

Imputation Credits

Imputation credits are available to any shareholder subject to German tax on his worldwide income. This generally excludes nonresident aliens, foreign corporations, and domestic entities not subject to German tax (although imputation credits are available to a foreign corporation or nonresident that holds the shares as part of a permanent establishment in Germany).

In general, dividends are subject at the corporate level to a creditable 36 percent distribution tax (described below) and to a 25 percent withholding tax at the corporate level. The withholding tax is imposed on the amount of the declared distribution. Thus, a distribution of DM64 is reduced by DM16 of withholding tax, leaving a cash distribution of DM48. The withholding tax applies without regard to whether the stock of the

distributing corporation is held publicly or privately, or by domestic or foreign shareholders. (The effect of tax treaties on withholding is discussed below.) In some circumstances the government will grant an exemption certificate to the shareholder which, when provided to the withholding agent, will exempt the shareholder from withholding.

The shareholder must gross up the amount of the dividend by the amount of the withholding tax plus the imputation credit (equal to 36/64 of the declared distribution). Thus, a cash dividend of DM48 (net of withholding tax) is grossed up to DM64 (for the withholding tax), and the resulting DM64 is then grossed up to DM100. The shareholder reports the grossed-up distribution as income and claims a credit equal to the amount of the total gross-up. If the credit exceeds the shareholder's tax liability, the shareholder receives a full refund of the excess; if the shareholder's tax liability exceeds the credit, the shareholder must pay the excess.

Compensatory Tax

The German system uses an "available net equity" account to track taxable and preference income with both the split rate tax and the imputation credit mechanisms. Available net equity represents after-tax corporate income and certain other balance sheet items available for distribution. Available net equity is divided into baskets representing the rate at which the income was taxed. These "Eigenkapital" (equity capital) baskets, abbreviated "EK," are:

- EK 56, containing available net equity from income taxed at the pre-1990 statutory rate of 56 percent. (As of January 1, 1995, the balance in this basket will be "emptied" into the EK 50 basket at a rate equal to 56/44 of the amount in the EK 56 basket.)
- EK 50, containing available net equity from income taxed at the post-1989 statutory rate of 50 percent.
- EK 36, containing available net equity from lesser taxed income that has been converted into an equivalent amount of income taxed at 36 percent, and thus matches the distribution rate of 36 percent (see discussion below).

- EK 0, containing available net equity from income subject to no corporate tax. EK 0 is further divided into four categories: EK 01, containing foreign source income realized after 1976 (the imputation credit became effective in 1977), EK 02, containing items not included in EK 01, 03 or 04, for example net operating losses (discussed below) and distributions made when there is no available net equity in any category (in the latter case, the corporation pays the 36 percent compensatory tax and includes the distribution in EK 02 as a negative item, permitting the corporation to later distribute an offsetting amount of EK 0 without a compensatory tax), EK 03, containing available net equity from years before 1977, and EK 04, containing shareholder contributions to capital in years after 1976.

Fully-taxed income (EK 56 or 50 income) is considered distributed first, followed next by EK 36 income, and last by EK 0 income.

Germany implements its split rate tax by refunding to corporations the excess tax paid on distributions out of EK 50 and EK 56.¹⁹ Distributions out of EK 36 generate neither a refund nor extra corporate tax. Distributions out of EK 0 (other than EK 04) are subject to a compensatory tax of 36 percent. If the corporation has DM100 in its EK 01 account, for example, it may pay the shareholder only DM64—the original DM100 in the account net of a 36 percent distribution tax. The additional tax is added to the corporation's total tax liability for the year to which the distribution is assigned. Distributions out of EK 04 (contributions to capital) generate no tax to the corporation and are excluded from the shareholder's income (as a return of capital).²⁰

There are generally no time limits on relief. Thus, a distribution from EK 56 earned in 1977 produces the same credit for corporate tax paid as a distribution from EK 56 earned in 1989. This means that the available net equity accounts need not be segregated into vintage accounts, and instead may be kept as "pools." Income earned prior to 1977, however, is placed in the EK 03 category, and thus there is no imputation relief at the shareholder level for German corporate taxes paid on such income.

A corporation might actually pay tax on certain income at rates other than those for which corresponding EK categories exist. (A substantial portion of such income is foreign source income, discussed below.) The German imputation system converts income subject to some other effective tax rate into appropriate amounts of EK 50, EK 36, and EK 0 income. The conversion formula maximizes the amount of pre-tax income converted into income taxed at the 36 percent distribution rate, since distributions from EK 36 neither entitle the corporation to a refund nor require the payment of compensatory tax. If the corporation's effective tax rate exceeds 36 percent, the remainder of its income is converted to EK 50 income; but if the corporation's effective tax rate falls short of 36 percent, the remainder of its income is converted to EK 0 income.²¹ For example, if the corporation has pre-tax income of DM100 on which it pays German tax of DM40, then the effective tax rate is greater than .36 ($40/100 = .40$), and so a portion of the income will be converted into income taxed at the 50 percent statutory rate.²² By contrast, if the corporation has pre-tax income of DM100 on which it pays German tax of DM25, then the effective tax rate is less than .36 ($25/100 = .25$), and so a portion of the income will be converted into income taxed at a zero rate.²³

The EK accounts are determined at the end of the taxable year.²⁴ A distribution is classified according to the accounts for the year preceding the year of the dividend declaration.

Dividends Defined, Bonus Shares, Share Repurchases

Any distribution of cash or property (whether liquidating or nonliquidating) is a taxable dividend for German tax purposes unless it is a distribution out of EK 04 or otherwise is a repayment of share capital.

Stock dividends are not subject to the distributions tax and are not taxable to shareholders. However, in certain circumstances, distributions

in reduction of share capital within 5 years of the stock dividend (to the extent not in excess of the increase in share capital resulting from the stock dividend) are taxable as dividends and are subject to a penalty tax.

Stock corporations generally are prohibited from making share repurchases under German corporate law. A GmbH is permitted to make share repurchases but is effectively required to finance them out of retained earnings (as opposed, for example, to borrowing against unrealized appreciation in its assets). Share repurchases are not subject to distribution tax at the corporate level and are capital gains transactions at the shareholder level.

Allocation of Credits to Dividends

As discussed above, Germany applies a uniform rate for purposes of determining the shareholder credit regardless of the rate of corporate tax that the distributed income has actually borne.

Tax Rates

Before 1990, individual marginal rates ranged from approximately 22 percent to 56 percent (effective for income exceeding DM130,000). Beginning in 1990, marginal rates range from approximately 19 percent to 53 percent (effective for income exceeding DM120,000).

There is a flat rate of 50 percent for retained profits (before 1990, the rate was 56 percent). This rate is reduced to 36 percent for distributed profits. Certain German "public banks" (banks generally owned by municipal or other public bodies) and German branches of foreign corporations are subject to a flat rate of 46 percent (pre-1990, 50 percent). (See below for a discussion of German branches.) Income sourced in the former western sector of Berlin is subject to a special tax rate of 38.75 percent (pre-1990, 43.4 percent). West Berlin branches of foreign corporations are subject to a special tax rate of 35.65 percent (pre-1990, 38.75 percent). The special tax rate for such income, however, is being phased out over a number of years as a result of unification.²⁵

Gains from sales of stock by individuals are exempt unless (1) the sale is connected with a business, (2) the stock is held 6 months or less, or (3) the shareholder owned more than 25 percent of the company's stock at some time during the preceding 5 years. Business and short-term gains are taxable to individuals at normal rates, except that short-term gains are exempt up to DM1,000 each year. Short-term losses may be netted against short-term gains. Gains by substantial individual shareholders are taxed at one-half the normal rate up to the first DM30 million of net gain and at the normal rate thereafter. Gains from exchanges of stock in a liquidation or redemption are treated as sales (except for any portion that is taxed as a dividend distribution).

Gains from sales of stock by corporations are taxable as ordinary income.

Effective for the period July 1, 1991, through June 30, 1992, Germany has imposed a tax on each taxpayer equal to 7.5 percent of the tax that such person would otherwise pay. The surtax applies to all individual and corporate taxpayers, foreign shareholders subject to dividend withholding tax, and German branches of nonresident corporations. For taxpayers using a calendar taxable year, the surtax has the effect of a 3.75 percent surtax in each of the 1991 and 1992 taxable years.

Treatment of Preference Income

Investment incentives in Germany generally take the form of accelerated depreciation for certain industries or regions of the country; there is no investment tax credit. There are special low corporate rates for income derived from the former western sector of Berlin (these rates, described above, are being phased out). Government "incentive grants" (in the form of cash awards) are awarded in certain cases (usually related to research and development and energy production).

The benefit of preferences that take the form of accelerated depreciation is not extended to shareholders. The benefit is eliminated through

the 36 percent compensatory tax applied to distributions out of EK 0. Preferences are stacked according to the EK accounts, as indicated. Thus, fully-taxed income (EK 56 or 50) is distributed first, and EK 0 is distributed last.

The benefit of the current reduced tax rate for West Berlin income is extended to shareholders. Such income is deemed to have borne the full imputation burden (EK 50 or EK 56).

Treatment of Domestic Intercorporate Dividends

Dividends paid to domestic corporations are treated exactly the same as dividends paid to resident individuals. The dividends are subject to the 36 percent distributions tax. The recipient corporation must include the grossed-up distribution in income and is entitled to claim the imputation credit. Therefore, preferences are recaptured at the corporate level on intercorporate dividends. No exemption from these rules is provided even where the distributing corporation is a subsidiary of the recipient corporation.

Treatment of Foreign Source Income

German corporations are subject to German corporate tax on their worldwide income. However, Germany has two methods for relieving double taxation with respect to foreign profits: by statute, it gives a foreign tax credit and, by treaty, it exempts foreign business profits earned by a domestic corporation (and gives no credit).

The foreign tax credit is not treated as tax paid for purposes of the imputation credit. In effect, foreign taxes are treated as deductible expenses for purposes of applying the imputation system. If the profits are covered by a treaty exemption, then the profits (net of foreign tax) are simply placed in EK 01 and are subject to the 36 percent distribution tax when paid to shareholders. If the profits are not covered by a treaty exemption, they are subject to a residual German corporate tax, as in the United States. In applying the imputation system to this latter class of profits, it is assumed that the profits (net of foreign tax)

were subject to a rate of German tax equal to the residual tax divided by the net profits.

Treatment of Tax-Exempt Shareholders

In Germany, the tax-exempt sector is divided into two separate groups for tax purposes: (1) public law corporations or bodies, e.g., the government and certain central banks, and (2) charitable organizations, including religious groups. Charitable organizations are exempt at the shareholder level, but public corporations are subject to one-half of the normal withholding tax of 25 percent.

In general, neither group is entitled to the imputation credit. However, the imputation credits are refunded where the dividend is paid out of EK 01 (foreign source income that has not borne German tax) or EK 03 (pre-1977 profits). In addition, all shareholders (except shareholders of foreign corporations with German branches) benefit from the 36 percent distribution rate on distributed profits.

Treatment of Foreign Shareholders

Income distributed to foreign shareholders, like all other income, is taxed at the corporate level at the distribution rate rather than at the statutory rate. No distinction is made, for this purpose, between portfolio and direct shareholders.

Dividends to direct and portfolio foreign shareholders are subject to the statutory withholding tax of 25 percent, except where reduced by treaty. Treaties frequently reduce the rate from 25 percent to 15 percent for direct corporate shareholders that are residents of the treaty partner. In some cases, the reduction applies to all residents of the treaty partner. (This was, for example, the treatment provided in the 1954 U.S.-Germany treaty).²⁶ Foreign shareholders also will be subject to the 7.5 percent surtax previously described. The surtax will be refunded to shareholders entitled to limited withholding under a tax treaty.

In general, foreign shareholders are not entitled to the imputation credit, and the withholding tax applies to the dividend without gross-up. Although Germany has not extended the imputation credit to foreign shareholders, it has been willing to reduce withholding rates by treaty, in part in recognition of the benefits of its imputation system to resident shareholders. In the new U.S.-Germany treaty that entered into force on August 21, 1991 (generally effective retroactive to January 1, 1990), Germany grants a 5 percent withholding rate for direct corporate shareholders (10 percent prior to 1992) and a 10 percent withholding rate for U.S. portfolio shareholders. Under the treaty, the United States agreed to treat the additional relief for portfolio investors as a dividend resulting from a refund of German corporate tax equal to 5.88 percent of the declared dividend; the entire amount (declared dividend plus refund) is considered to have been subject to a 15 percent German withholding tax. Thus, for U.S. tax purposes, if a German corporation declares a dividend of DM100 payable to a U.S. individual shareholder, the dividend will, in effect, be grossed up to DM105.88. After application of a 15 percent withholding rate, the shareholder will receive a net amount of DM90 and be eligible for a foreign tax credit of DM15.88.

Foreign shareholders are entitled to a refund (subject to withholding tax) of the 36 percent distribution tax imposed on two types of distributions: (1) distributions out of foreign source income and (2) distributions out of domestic source income earned prior to the adoption of integration in 1977. The refund is only for the 36 percent distribution tax, not for the foreign or pre-1977 taxes. Refunds paid to foreign shareholders with respect to such distributions are subject to 25 percent withholding unless a treaty provides for a reduced rate. In the latter case, the reduction is granted directly by the government, eliminating the need to apply for a refund of excess withholding.

German branches of foreign corporations are subject to a corporate tax rate of 46 percent (pre-1990, 50 percent). There is no reduction in the

corporate rate when the profits are remitted to the home office or distributed to the foreign corporation's shareholders (nor is there imposed a branch tax, as under IRC § 884); the distribution of the profits to the shareholders is not subject to German withholding; and the shareholders are not entitled to any imputation credit with respect to the German corporate tax.²⁷

Treatment of Low-Bracket Shareholders

As discussed above, excess credits are fully refundable to low-bracket shareholders.

Streaming

An anti-streaming rule applies where (1) a shareholder sells a substantial interest in a German corporation (i.e., shares with a value of more than DM100,000), (2) the shareholder is not entitled to the shareholder credit (i.e., a tax-exempt or foreign shareholder), (3) the shareholder sells the shares to a person entitled to the credit (i.e., a German resident), and (4) the gain realized on the sale is not subject to German tax. In such case, the acquiror is not allowed to recognize loss on disposition of shares within 10 years to the extent the loss is attributable to dividends paid by the German corporation.

Treatment of Interest

Interest paid by German corporations on indebtedness incurred for business purposes generally is deductible. However, interest paid by an undercapitalized subsidiary to a related party may be recharacterized as a hidden dividend.

Interest paid by German corporations to resident lenders is includable in income. Interest paid by German corporations to nonresident lenders generally is not subject to any German withholding tax. Interest paid on participatory or convertible bonds, however, is subject to withholding at a statutory rate of 25 percent rate. Lower treaty rates or treaty exemptions may apply.

B.5 NEW ZEALAND

Introduction

New Zealand adopted an imputation credit system beginning with the tax year starting April 1, 1988.

Description of General Mechanics

Imputation Credits

For purposes of shareholder level taxation, the amount of a dividend includes the amount of imputation credits that the corporation allocates to the dividend (see "Allocating Credits to Dividends," below) from its "imputation credit account" (ICA). The imputation credits are then creditable against shareholder tax liability. Excess credits are not refundable but do convert into an equivalent loss carryforward.

The New Zealand system requires every taxable domestic corporation to maintain an ICA. The ICA is a memorandum account that runs from April 1 to March 31, regardless of the corporation's fiscal year. The first imputation year ran from April 1, 1988, to March 31, 1989. Unlike Australia's year-to-year franking account, the ICA is a continuing account, and so a negative year-end balance in the ICA results in a tax levy.

The ICA is credited when the corporation pays New Zealand income tax or receives imputation credits attached to dividends paid by another corporation. Where a refund of tax becomes due because of a revised tax assessment, the amount of the refund available is limited to the closing balance of the ICA for the previous year. The amount of a refund in excess of the balance is carried forward and may be used to reduce future tax liability of the corporation.

The ICA is debited when the corporation attaches imputation credits to dividends paid to shareholders, receives refunds of New Zealand income tax, or alters its credit ratio without making a ratio change declaration. See

"Allocating Credits to Dividends," below. A closing debit must be cleared within two months by making a "further income tax" payment—available to offset future income tax liabilities, but not arrears—and also results in a 10 percent penalty.²⁸ See also "Streaming" below.

Compensatory or Withholding Tax

New Zealand does not impose a compensatory tax. Recently, New Zealand introduced a withholding tax for dividends paid to residents that do not carry imputation credits. Technically, the resident withholding tax is imposed on all dividends at a rate of 33 percent (the higher individual marginal rate), but an offset is allowed to the extent the corporation is passing through imputation and foreign source dividend withholding payment credits allocated to the dividend. (See "Treatment of Foreign Source Income" below for a discussion of the "dividend withholding payment" relating to foreign source dividends.) As with imputation credits, the amount of the dividend includes the resident withholding tax paid and the withholding tax is creditable against shareholder tax liability. However, excess resident withholding tax credits are refundable.

Dividends Defined, Bonus Shares, Share Repurchases

In general, all nonliquidating distributions to shareholders are treated as taxable dividends (under corporate law, the corporation cannot pay dividends as a return of capital without a court order); on liquidation, the amount in excess of paid-up capital is a dividend.

A taxable bonus issue, although technically not a dividend, may carry imputation credits. A corporation with profits essentially may elect whether to treat a bonus issue as taxable. In addition, a bonus issue is taxable if shareholders may elect to receive cash in lieu of stock. However, the importance of bonus issues as a mechanism for extending the imputation system to retained earnings is reduced, because, as described under "Tax Rates," below, New

Zealand does not impose tax on capital gains (including gains on sales of stock of New Zealand corporations).

In the case of share repurchases, the amount treated as a dividend is limited to the excess of the amount paid over the sum of the stated capital and qualifying premium with respect to the share. The qualifying premium is equal to the proportionate share of the subscription premium paid on issuance of the class. The limitation applies, however, only if the Inland Revenue Department is satisfied that the shares are not being redeemed pursuant to an arrangement to redeem shares in lieu of the payment of dividends.

Allocating Credits to Dividends

New Zealand's imputation statute does not require a corporation to allocate any credit to a dividend, but certain allocation rules significantly limit a corporation's flexibility to reduce opportunities to stream imputation credits to shareholders who can best use them. The maximum amount that can be allocated to a dividend is determined by multiplying the dividend by a fraction, the numerator of which is the corporate tax rate and the denominator of which is one minus the corporate tax rate. Once the corporation allocates credits to a dividend, the corporation has established the "benchmark" imputation ratio, and the corporation must generally use the same ratio in allocating credits to any other dividend paid in the same imputation year on any class of stock. The corporation may change its ratio, if it files with the Inland Revenue Department a "ratio change declaration" showing that the change is made for commercial reasons and not to convey an imputation credit benefit to one group of shareholders over another. If the corporation uses a ratio different from the benchmark and has not filed a ratio change declaration, it must debit its ICA by the amount by which the account would have been debited if all dividends that year had been credited at the highest rate used that year. Additional tax and penalties are due if, as a result, the closing balance is negative.

Tax Rates

The corporate tax rate is currently 33 percent. Individuals pay tax at two marginal rates: 24 and 33 percent. The 33 percent rate applies to individuals with taxable incomes exceeding NZ \$30,875, adjusted for inflation. New Zealand currently imposes no tax on capital gains.

Treatment of Preference Income

Because a corporation may attach credits to dividends only to the extent of taxes actually paid by it, corporate tax preferences generally are not extended to shareholders. When preference income is distributed as an uncredited dividend, the amount of the dividend, in general, is subject to resident withholding tax. However, subject to the credit allocation limitations described above, a corporation may choose the order in which taxable income and preference income are considered distributed. In addition, New Zealand recently attempted to eradicate most tax preferences. Various concessions remain for certain industries, most relating to timber, livestock, farming and fishing. New Zealand also offers certain export incentives. The research and development deduction is 100 percent, with special rules for depreciable property.

Treatment of Domestic Intercorporate Dividends

Until April 1, 1992, corporations are exempt from tax on the receipt of domestic source dividends. Any imputation credits attached to such dividends are credited to the recipient's ICA and may be used to frank dividends to its shareholders. The effect of this system is preserve corporate tax preferences until preference income is distributed out of corporate solution.

Under a recent decision of the New Zealand Government, domestic source dividends are not exempt from tax when received by a corporate shareholder on or after April 1, 1992. Instead, the normal gross-up and credit rules apply and a

corporate shareholder thus will be taxed on the receipt of an unfranked, domestic source dividend. The reason for this change is to prevent corporations with tax losses from effectively transferring the losses to corporate shareholders through the issuance of redeemable preference shares and using the proceeds to invest in interest-bearing securities. Another effect of the change is to recapture preferences on the distribution of preference income to a corporate shareholder.

To mitigate the effect of the repeal on affiliated groups of corporations and for other reasons, a group of corporations with 100 percent common ownership is allowed to consolidate for tax purposes. A consolidated group would maintain a single ICA and intercorporate dividends would be ignored.

Treatment of Foreign Source Income

Foreign source income other than dividends is includable in income, and New Zealand allows a credit for foreign taxes paid. Because a corporation credits its ICA only with any additional New Zealand corporate tax paid, foreign taxes do not give rise to imputation credits, and dividends to shareholders of a New Zealand corporation paid out of foreign source nondividend income are exposed to a second level of tax. Foreign source dividends received by New Zealand corporations are exempt from tax but are subject to a "dividend withholding payment" as described below. Foreign taxes paid on the dividend generally are not added to the ICA and, accordingly, dividends paid to shareholders of the New Zealand corporation out of foreign source dividend income also are subject to shareholder level tax. Special rules apply to income derived from controlled foreign corporations (CFCs). The net effect of the New Zealand system is the equivalent of allowing a deduction for foreign taxes on distributed foreign source income earned through a New Zealand corporation.

Dividend Withholding Payment Account (WPA)

New Zealand enacted a withholding payment system (at the 33 percent corporate rate) that

applies to all foreign source dividends received by New Zealand resident corporations. The payment is designed to approximate the income tax that a New Zealand individual shareholder would pay on a dividend from a nonresident company. The corporation makes dividend withholding payments only to the extent the New Zealand corporate tax rate exceeds the foreign withholding tax rate.

Although styled a withholding payment, the payment is imposed when the corporation receives the foreign dividend, regardless of whether it makes a distribution to its own shareholders. However, the corporation records the dividend withholding payments in its ICA, and thus can pass through a credit to its shareholders when it pays dividends. Alternatively, the corporation may establish a separate Withholding Payment Account (WPA) and allocate dividend withholding payment credits from the WPA to its shareholders. A WPA might be desirable because the imputation credit is nonrefundable and can only be converted into a loss, but the dividend withholding payment credit is refundable to shareholders. In addition, only dividend withholding credits are creditable against the withholding tax that applies to dividends paid to nonresident shareholders. Accordingly, a corporation that owns significant interests in nonresident companies and that is owned in significant part by tax-exempt or foreign shareholders will find the additional paperwork of a separate WPA worthwhile.

The WPA is maintained under rules similar to the ICA rules. The WPA is credited when the corporation pays dividend withholding payments, and when it receives dividends bearing dividend withholding payment credits. The WPA is debited when dividend withholding payment credits attach to dividends paid to shareholders, and when the corporation chooses to transfer any part of a WPA closing credit balance to its ICA. If the corporation has an income tax loss carryforward, or expects to generate one, it may reduce that loss to satisfy all or part of the dividend withholding amount payable (or obtain a refund of payments). A closing negative balance in the WPA must be satisfied with a "further" dividend withholding payment (which may be credited against future

dividend withholding payments due, but cannot be refunded). A debit closing balance, in addition, automatically incurs a 10 percent penalty.

Dividend withholding payment credits may be allocated to dividends paid to shareholders under rules similar to and coordinated with the allocation rules for imputation credits.

Branch Equivalent Tax Account (BETA)

The Branch Equivalent Tax Account (BETA) regime is designed to reduce the potential for deferring New Zealand tax by accumulating income in low-tax countries. A CFC is a foreign corporation (not resident in Australia, the United States, the United Kingdom, Japan, France, Germany or Canada) in which five or fewer New Zealand residents have a controlling (50 percent or more) interest.²⁹ Any New Zealand resident with a 10 percent interest in a CFC must include in income its proportionate share of the CFC's income and receives credit for its proportionate share of foreign income taxes paid by the CFC. Any New Zealand tax paid is then credited to the BETA (or to the ICA if the corporation does not elect to maintain a separate BETA). Credits from a BETA can be used to satisfy the dividend withholding payment liability on later dividends actually received from the CFC. When BETA credits are so used to satisfy the WPA liability, a corresponding credit to the ICA is made.

Treatment of Tax-Exempt Shareholders

New Zealand has a small tax-favored investor sector. Under recent reforms, New Zealand fully taxes pension plans. At the same time the new imputation scheme went into effect, New Zealand conformed the treatment of Maori authorities to that of corporations (or, in appropriate cases, to that of trusts). In addition, New Zealand repealed the income tax exemption on "qualifying activities" enjoyed by certain cooperatives dealing in primary products.

For tax-exempt charitable and governmental shareholders, imputation credits in excess of tax

liability are not refundable. However, such tax-exempt shareholders are exempt from resident withholding tax so preferences are not recaptured where preference income is distributed to them.

Treatment of Foreign Shareholders

In general, the benefits of the imputation credit system generally are not extended to foreign shareholders. New Zealand imposes a non-resident withholding tax at the rate of 30 percent for dividends, with no difference in treatment of portfolio and nonportfolio investors. In some cases, treaties reduce that rate, but to no less than 15 percent. Imputation credits are not creditable against nonresident withholding tax (although dividend withholding payment credits are creditable against such tax).

Low-Bracket Shareholders

Excess imputation credits are available to offset any other tax liability of the taxpayer, but are not refundable. Imputation credits not used in the year that they are received convert into a loss, which carries forward indefinitely. Excess dividend withholding payment credits and resident withholding tax credits are refundable.

Streaming

In addition to the allocation rules discussed above, New Zealand's imputation system contains several anti-streaming provisions. The ICA, WPA, and BETA must be debited to reverse a credit where, after the credit arises, the corporation undergoes a change of beneficial ownership of more than 25 percent (34 percent after April 1, 1992).³⁰ In addition, the ICA and WPA are debited if there is a "shareholder or company tax advantage arrangement" (a streaming arrangement). The use of credits by shareholders is denied if the shareholders are party to such an arrangement or if there is an arrangement for the shareholder to be paid a dividend by another company. The latter provision applies, for example, where streaming is accomplished through stapled share arrangements.

Treatment of Interest

Interest paid by a New Zealand corporation is generally deductible. Interest paid to a resident lender is includable in the lender's income and, with certain exceptions, is subject to a withholding tax imposed at a rate of 24 percent. Withholding tax at a statutory rate of 15 percent is imposed on interest paid to a foreign lender. The New Zealand Government recently announced its decision to exempt from withholding tax interest paid on debt issued on or after August 1, 1991 by "Approved Issuers" (issuers that agree to pay a levy equal to 2 percent of the amount of the interest paid for the right to pay exempt interest). In addition, in some cases, treaties reduce the withholding rate, but to no less than 10 percent.

B.6 UNITED KINGDOM

Introduction

The United Kingdom provides for distribution-related integration of the individual and corporate income tax systems by allowing a credit for corporate tax paid with respect to distributed earnings. The amount of the credit is determined as though the corporation had paid tax at the "basic" individual rate, currently 25 percent, rather than at the corporate rate, currently 33 percent (except for small corporations, which may be taxable at a 25 percent rate). Thus, the credit provides only partial relief (except for small corporations) from corporate level tax because actual corporate tax paid with respect to distributed earnings is not fully creditable at the shareholder level.

Description of Mechanics

Imputation Credit

When a corporation makes a "qualifying distribution" (described below) to its shareholders, the distribution carries with it an imputation credit. The shareholder includes the amount of the credit in his taxable income in addition to the amount of the distribution and may use the credit against his income tax liability. The amount of the

imputation credit equals the amount of net qualifying distributions, grossed up at the basic personal rate (25 percent), and then multiplied by that rate.³¹ Accordingly, if the shareholder's actual marginal tax rate equals the basic rate, then the shareholder owes no tax on the distribution. Generally, the imputation credit is refundable to all resident, non-corporate shareholders, including tax-exempt shareholders.

Compensatory or Withholding Tax

The United Kingdom imposes an "Advance Corporation Tax" (ACT) on qualifying distributions equal to the amount of corporate tax imputed to shareholders (at a 25 percent grossed-up rate). The corporation may apply ACT payments against its regular tax liability (mainstream tax) subject to the limitations described below. Because preference income generates no mainstream tax, ACT effectively recaptures preferences at the corporate level on the distribution of preference income, thereby assuring that preference income ultimately is taxed at shareholder rates.

The amount of ACT that may be applied against mainstream tax is limited to an amount that equals 25 percent of the corporation's taxable income for the year. Excess ACT may be carried back for up to 6 years and may be carried forward indefinitely. Alternatively, current year and surplus ACT can be surrendered to a more than 50 percent-owned subsidiary. Because excess ACT is not refundable, uncredited ACT represents an additional tax liability to the corporation until the corporation earns sufficient additional taxable income to absorb it. In practice, because of the numerous tax preferences provided by U.K. law, many corporations carry excess ACT credits on their books.³²

Dividends Defined, Bonus Shares, Share Repurchases

The U.K. system generally defines a qualifying distribution to include any non-liquidating distribution of cash or property made by a corporation with respect to its shares, other than a repayment of share capital. Liquidating

distributions are not treated as qualifying distributions, and thus neither the ACT nor the gross-up and credit mechanism applies.

Bonus issues are not qualifying distributions. This rule prevents corporations from having to pay ACT on bonus issues. However, cash distributions on bonus issues of redeemable shares made within 10 years of their issuance generally are qualifying distributions even if paid out of share capital.

Share repurchases are generally treated as qualifying distributions to the extent that the amount paid exceeds share capital, and the corporation must pay ACT on the amount so treated.

Allocation of Credits to Dividends

Because the gross-up and credit mechanism described above applies to each qualifying distribution at the assumed 25 percent rate, no allocation rules are necessary.

Tax Rates

The corporate rate, until recently, was 25 percent for income up to £100,000 and 35 percent for income greater than £500,000. (The U.K. system phases out the reduced corporate rate, which resulted in a marginal rate of 37.5 percent for corporate income between £100,000 and £500,000.) On March 29, 1991, the Chancellor of the Exchequer introduced a budget that (1) reduces the 35 percent corporate rate to 34 percent retroactive for profits earned in financial year 1990, and to 33 percent for profits earned in 1991, and (2) raises the ceiling on the 25 percent rate to £250,000.

The individual rate is 25 percent for income up to £20,700 and 40 percent for income over this level.

Capital gains are taxed at the same rate as ordinary income. In calculating the amount of gain on disposition of a capital asset, the basis in the asset is indexed for inflation. In addition,

individuals are eligible for an annual capital gains exclusion of £5,000, also indexed for inflation.

Treatment of Preference Income

As discussed above, the ACT generally prevents corporate preferences from being extended to shareholders (preference income is taxed at shareholder rates when distributed). However, crediting ACT against mainstream tax has the effect of treating distributions as made first from taxable income.

The U.K. system provides corporations with a variety of tax preferences. The most significant is accelerated capital allowances or "writing down" allowances (equivalent to accelerated depreciation or amortization). To provide investment incentives, accelerated cost recovery is allowed for certain types of capital expenditures. Generally, all investments in business machinery and equipment are "pooled," i.e., treated as a mass asset. In lieu of depreciation, taxpayers are permitted to recover 25 percent of the pool each year, on a declining balance basis. Scientific research expenditures and certain oil exploration costs in the U.K. can be fully deducted in the year incurred even if they create an asset. Capital expenditures on industrial and commercial buildings in enterprise zones are deductible in full when incurred. Additional preferences are available for mineral extraction operations, industrial buildings, and patents and know-how.

Treatment of Domestic Intercorporate Dividends

A U.K. corporation paying a qualifying distribution to another U.K. corporation generally must pay ACT on the distribution, but the recipient corporation is exempt from tax on the distribution. A U.K. corporation receiving a dividend generally cannot claim a refund or credit of ACT paid on that dividend. However, the recipient corporation can redistribute a dividend that has been subject to ACT (franked investment income) without incurring further ACT, and its shareholders are entitled to a credit for the ACT paid

by the original distributing company. The effect of imposing ACT on intercorporate dividends is to recapture preferences prior to distribution of preference income out of corporate solution.

If a recipient corporation receives more franked investment income than it distributes, it can carry forward the excess franked investment income indefinitely. Alternatively, the recipient corporation may claim a refund of ACT paid on the excess franked investment income by offsetting the excess against any losses for the year. If, in a subsequent year, payments by the corporation of franked investment income exceed receipts of franked investment income, any refund of ACT received in the earlier year is recaptured.

Qualifying distributions between U.K. corporations are not subject to ACT if a group dividend election has been made. Such an election may be made with respect to dividends from a more than 50 percent owned subsidiary. If a group dividend election is made, the distribution is not treated as franked investment income and thus is subject to ACT when redistributed.

Treatment of Foreign Source Income

U.K. corporations are taxed on their worldwide income, with relief from double taxation provided through a foreign tax credit system. U.K. corporations are allowed a credit for foreign taxes paid subject to the following limits.³³ First, the foreign tax credit is allowed only against U.K. tax payable on foreign source income from the particular source with respect to which the foreign tax was paid. Second, unused foreign tax credits may not be carried forward or back.

Foreign tax credits cannot be used to satisfy liability for ACT where qualifying distributions are paid out of foreign source income. Thus, the benefit of the foreign tax credit is washed out with respect to distributed foreign source income.

The amount of ACT that may be applied against mainstream tax imposed on foreign source income effectively is the lesser of (1) the mainstream tax on foreign source income and (2) 25

percent of foreign source taxable income. The effect is that foreign tax credits are allowed before the ACT and ACT that is unused because of foreign tax credits is carried back or forward. This ordering rule favors taxpayers because surplus ACT, unlike surplus foreign tax credits, can be carried forward.³⁴

Treatment of Tax-Exempt Shareholders

A tax-exempt shareholder is entitled to a refund of the shareholder credit. The primary entities exempt from tax on investment income are charities, pension plans (called "exempt approved schemes"), and building societies.

Treatment of Foreign Shareholders

The treatment of dividends paid by U.K. corporations to foreign shareholders varies depending on whether they are entitled to treaty benefits. Except as provided by treaty, only shareholders that are U.K. residents are entitled to imputation credits on dividends received from U.K. corporations. On the receipt of such dividends, a foreign shareholder not entitled to treaty benefits is treated as having income equal only to the amount of the distribution (rather than the distribution plus the imputation credit), the rate of tax applicable is the same as for residents (25 or 40 percent for individuals), the foreign shareholder is treated as having paid tax at the 25 percent rate on the distribution, and the foreign shareholder generally is not entitled to the imputation credit.

Under tax treaties, foreign shareholders generally are entitled to some or all of the imputation credits otherwise allowable to resident shareholders with respect to a dividend from a U.K. corporation, and the rate of tax is reduced (the amount of the reduction may vary depending on whether the shareholder is a portfolio or nonportfolio investor). For example, for a U.S. shareholder owning less than 10 percent of the stock of the distributing corporation, the U.S. treaty entitles the shareholder to the full imputation credit and reduces the tax to 15 percent of the

amount of the dividend grossed up for the credit (imposed as a withholding tax). For a U.S. shareholder owning at least 10 percent, the shareholder is entitled to one-half of the imputation credit and the rate of tax is reduced to 5 percent of the dividend grossed up for the amount of the credit allowed (also imposed as a withholding tax).³⁵

Streaming

The U.K. system contains several anti-streaming provisions. For example, tax-exempt shareholders purchasing at least 10 percent of a corporation are subject to tax at a 10 percent rate on dividends made out of pre-acquisition earnings (but may use attached credits to offset the tax). Restrictions on entitlement to imputation credits apply where there is an arrangement to channel credits to shareholders of a close investment holding company.

In addition, the United Kingdom has adopted measures to prevent trafficking in excess ACT.

The principal limitation is triggered where, following a major change in share ownership (a more than 50 percent increase by one or more 5 percent shareholders over a 3 year period), there is a major change in nature or conduct of the corporation's business or a considerable revival of business that had been negligible prior to the ownership change. In such a case, pre-change surplus ACT cannot be used to offset post-change mainstream tax.

Treatment of Interest

Interest paid by U.K. corporations generally is deductible if the indebtedness is incurred for business purposes. Interest received by a resident lender generally is includable in the lender's income. Foreign lenders are taxed on U.K. source interest at the same rate as residents, but this tax may be reduced or eliminated under treaties. For example, U.K. source interest received by a U.S. resident is exempt from U.K. tax under the U.S. treaty.

APPENDIX C: EQUIVALENCE OF DISTRIBUTION-RELATED INTEGRATION SYSTEMS

The dividend exclusion, imputation credit and dividend deduction systems produce equivalent results if corporate and shareholder tax rates are the same, all shareholders are taxable, and no corporate tax preferences exist. This appendix illustrates that equivalence and shows how the three systems diverge when each of these assumptions is relaxed.

C.1 EQUIVALENCE OF SYSTEMS IF TAX RATES WERE EQUAL

Table C.1 illustrates the equivalence of the three different types of systems when individual and corporate tax rates are equal (34 percent in the example), all shareholders are subject to tax, and no corporate tax preferences exist. For simplicity, all examples assume that corporations distribute all income when earned.

It might appear counterintuitive that the dividend deduction and imputation credit systems lead to exactly the same result. Nevertheless, from an economic perspective, the two systems are equivalent under these assumptions. This equivalence depends on the assumption that shareholders are indifferent between receiving a certain amount of money as a cash dividend or the

same amount split between a cash dividend and a tax credit. Under either the dividend deduction or the imputation credit system, the shareholder has the same after-tax income and pays the same amount of tax. Thus, the corporation's behavior should be the same economically under both systems. To achieve equivalence under the three systems, in the example above, the corporation must adjust its cash dividends to leave its shareholders in identical after-tax positions. This assumption probably better reflects long-term than short-term behavioral responses to the various integration mechanisms.

C.2 EFFECTS OF RATE DIFFERENCES, PREFERENCE INCOME, AND EXEMPT SHAREHOLDERS

Rate Differences

If corporate and shareholder tax rates differ, the three systems no longer produce equivalent results. A dividend exclusion system eliminates whatever shareholder level tax would otherwise be imposed. A dividend deduction system eliminates the corporate level tax and retains the shareholder level tax.

Table C.1
Equivalence of Distribution-Related Integration Systems

	Classical System	Dividend Exclusion	Dividend Deduction	Imputation Credit
Corporate income	100	100	100	100
Distribution	66	66	100	66
Corporate tax	34	34	0	34
Shareholder credit	0	0	0	34
Cash received	66	66	100	66
Shareholder income	66	0	100	100
Shareholder tax ¹	22	0	34	0
Total tax paid	56	34	34	34

¹Tax due after credits, if any.

An imputation credit system can be structured to tax distributed earnings at either the corporate or individual rate. To tax distributions at the individual rate, a credit would be allowed to shareholders for the full amount of corporate tax paid with respect to a distribution. This credit would be allowable against tax on other income, or, if there were no such tax, fully refundable. To tax distributions at the corporate rate, a credit would be

allowed only for tax at the shareholder rate on the sum of the cash distribution and the credit (\$95.65 in the second to last column in the example below).¹

Table C.2 assumes a shareholder rate of 31 percent and a corporate rate of 34 percent.

Preference Income

If some corporate income is not taxed, or is taxed at a lower rate, the alternative systems also do not produce equivalent results. Without modification of the sort described in Section 2.B, a dividend exclusion would automatically extend corporate tax preferences to shareholders, because preference income would not be taxed (or would be taxed at a lower rate) at the corporate level and, with an exclusion for all dividends received, would not be taxed at the shareholder level. A dividend deduction system would not extend preferences to shareholders because shareholders would include dividends in income.

An imputation credit system can be designed to achieve either result. If, as this Report recommends, the policy choice is not to extend preferences to shareholders, a system can be designed to limit the shareholder credit to the corporate tax actually paid with respect to the distribution. If

the policy choice is to extend preferences, where corporate and shareholder rates are equal, the system could determine the shareholder credit as though the corporation had paid tax at the full rate on all income, i.e., by grossing up the cash distribution at the full corporate rate.² Passing through preferences where there are rate differences is somewhat more difficult.³

To illustrate the effects of preferences, holding tax rates equal, Table C.3 assumes that the corporate rate and the shareholder rate are both 34 percent.

Tax-Exempt and Foreign Shareholders

If certain shareholders are wholly or partially exempt from U.S. tax, the alternative distribution-related integrated systems do not produce equivalent results, even if corporate preferences are not taken into account. A dividend exclusion system replicates the current treatment of tax-exempt shareholders, because corporate income is taxed at the corporate level, and a tax-exempt shareholder would receive no additional benefit from a shareholder level exclusion.⁴ In contrast, a dividend deduction system produces an absolute benefit to tax-exempt shareholders because corporations could reduce or eliminate the corporate level tax that applies to income from equity

Table C.2
Effect of Rate Differences

	Classical System	Dividend Exclusion	Dividend Deduction	Imputation Credit	
				At Shareholder Rate	At Corporate Rate
Corporate income	100	100	100	100	100
Distribution	66	66	100	66	66
Corporate tax	34	34	0	34	34
Shareholder credit	0	0	0	29.65	34
Cash received	66	66	100	66	66
Shareholder income	66	0	100	95.65	100
Shareholder tax ¹	20.46	0	31	0	0
Total tax paid	54.46	34	31	34	31 ²

¹Tax due after credits, if any.

²The shareholder would have an excess credit of \$3 that would be refunded or could be used to offset other tax liability.

Table C.3
Effect of Preferences

	Classical System	Dividend Exclusion	Dividend Deduction	Imputation Credit	
				Preferences Passed Through	Preferences Not Passed Through
Corporate income	100	100	100	100	100
Preference income	40	40	40	40	40
Taxable income	60	60	0	60	60
Distribution	79.6 ¹	79.6 ¹	100	79.6 ¹	79.6 ¹
Corporate tax	20.4	20.4	0	20.4	20.4
Shareholder credit	0	0	0	41	20.4
Cash received	79.6	79.6	100	79.6	79.6
Shareholder income	79.6	0	100	120.6	100
Shareholder tax ²	27.06	0	34	0	13.6
Total tax paid	47.46	20.4	34	20.4	34

¹This is the maximum amount the corporation can distribute after payment of the corporate level tax.

²Tax due after credits, if any.

supplied by tax-exempt shareholders by deducting payments of dividends to tax-exempt shareholders. A dividend deduction system also would maintain the same benefit relative to taxable investors that tax-exempt shareholders enjoy under current law.

An imputation credit system with full refundability would have the same effect as a dividend deduction system. An imputation credit system that does not permit credits to be refunded to tax-

exempt shareholders would have the same effect as a dividend exclusion system.

Table C.4 assumes that all shareholders are fully exempt from tax and that the corporation pays tax on all of its income at a 34 percent rate.

The treatment of foreign shareholders under each system is similar. A dividend deduction system would extend automatically the benefits of

Table C.4
Effect of Tax-Exempt Shareholders

	Effect of Tax-Exempt Shareholders				
	Classical System	Dividend Exclusion	Dividend Deduction ¹	Imputation Credit	
				Refundable	Not Refundable
Corporate income	100	100	100	100	100
Distribution	66	66	100	66	66
Corporate tax	34	34	0	34	34
Shareholder credit	0	0	0	34	34
Cash received	66	66	100	66	66
Shareholder income	66	0	100	100	100
Shareholder tax ²	0	0	0	0 ³	0
Total tax paid	34	34	0	0	34

¹No withholding on dividends. (A dividend deduction system with a nonrefundable "withholding" tax of 34 percent would duplicate the results under a dividend exclusion system or an imputation credit system with nonrefundable credits.)

²Tax due after credits, if any.

³The tax-exempt shareholder would receive a \$34 refund.

integration to foreign shareholders, because only one level of tax (the current withholding tax on dividends) would be collected on corporate income distributed to foreign shareholders. A dividend exclusion system would automatically deny the benefits of integration to foreign

shareholders (assuming, again, that the current withholding tax remains in place). In contrast, an imputation credit system would extend benefits to foreign shareholders if the imputation credit is refundable and would deny benefits if the credit is not refundable to foreign shareholders.

NOTES

PART I

Chapter 1

1. If corporate income were not subject to tax until distributed to shareholders, retained earnings would be taxed under the individual income tax system only when shareholders realize capital gains on the sale of stock. Shareholders could defer or avoid individual income tax simply by retaining earnings in corporations. See Pechman (1987) and Warren (1981). While this argument counsels against repeal of the corporate income tax, it does not apply to the integration proposals discussed in this Report, none of which permit such indefinite deferral of tax on corporate income.

Some have suggested that a mark-to-market regime for corporate stock would remove the potential deferral associated with investment in corporations and, thus, the need for the corporate tax. Under a mark-to-market regime, shareholders would recognize each year the change in the value of the corporation, including corporate income. See Shakow (1986) and Thuronyi (1983). While marking to market corporate stock could be considered a method of integrating the corporate and shareholder tax systems, it also would tax shareholders on income that is unrealized at the corporate level. We do not explore that approach in this Report, because abandoning the realization requirement goes well beyond the changes necessary to achieve integration.

2. Tax Reform Act of 1986, P.L. 99-514, 100 Stat. 2085, Oct. 22, 1986.

3. *General Utilities & Operating Co. v. Helvering*, 296 U.S. 200 (1935).

4. This increase in welfare compares favorably to that estimated for the 1986 Tax Reform Act at the time of its adoption. See Fullerton, Henderson, and Mackie (1987).

5. Appendix A contains a more detailed discussion of the taxation of corporations under current law.

6. Characterizing the corporate income tax as a double tax rests on the assumption that the corporate level tax reduces corporate income available to shareholders. If the corporate tax does not reduce profits but instead increases prices charged to consumers or lowers wages paid to workers, little or no additional tax may be paid on dividends. Section 13.G discusses the incidence of the corporate tax. In addition, not all income earned by corporations is taxed when earned, and not all shareholders are subject to taxation. Chapter 5 discusses tax preferences and Chapters 6 and 7 examine the issues of tax-exempt and foreign investors.

7. The Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508, 104 Stat. 1388 (the 1990 Act) made three changes in the individual income tax rate structure. First, the 1990 Act increased the top marginal tax rate for individuals to 31 percent from 28 percent. A number of other statutory provisions may affect statutory marginal rates. For example, the 1990 Act created an explicit phaseout of personal exemptions for taxpayers with adjusted gross income (AGI) above certain thresholds. For a married couple filing jointly, for example, the deduction for personal exemptions phases out at a rate of 2 percent for each \$2,500 of AGI above \$150,000. The 1990 Act also enacted a rule disallowing a portion of itemized deductions otherwise allowable to high-income taxpayers. Itemized deductions (other than medical, casualty and theft, and investment interest deductions) are generally reduced by 3 percent of AGI in excess of \$100,000, except that the disallowance cannot exceed 80 percent of the affected itemized deductions.

8. Interest received by foreign lenders that are related to the borrower or by foreign banks on loans made in the ordinary course of business, is, however, subject to withholding tax at 30 percent or a lower treaty rate.

9. In addition to the distortions created by the two-tier tax, distortions may result from the rules used to measure business income. For example, the Code generally fails to correct for distortions in the tax base attributable to inflation or to the requirement that a capital gain be realized before being subject to tax. These measurement problems affect both corporate and unincorporated business income. Because the general reform of business income measurement rules is beyond the scope of this Report, we take the existing system of income measurement rules as given.

10. See Harberger (1962 and 1966) and the subsequent studies cited in Chapter 13, note 1.

11. This simple example abstracts from other factors affecting the cost of capital, including: (i) differences between tax and economic depreciation; (ii) differences in tax rates among investors; and (iii) inflation.
12. See Gravelle (1991). These calculations assume (i) a rate of inflation of 4 percent; (ii) an average holding period of 7 years; and (iii) that two-thirds of capital gains are deferred until death.
13. Data for the past few years (some of it preliminary) shows a reduction in the size of the corporate sector relative to the noncorporate sector and the overall economy. Particularly since 1986, S corporations have accounted for an increased share of corporate profits. Long-term comparisons of corporate activity with general economic activity, however, present no clear trend toward disincorporation. See Chapter 13.
14. See Gravelle (1991).
15. Inflation adds a complication here. Because the tax system taxes nominal rather than real returns, the deductibility of interest expense under current law offers an even greater tax advantage to corporate debt financed investments (relative to corporate equity financed or noncorporate investments) in the presence of inflation, since corporations typically deduct nominal interest payments at a higher tax rate than the rate at which lenders are taxed on these payments. See Fullerton, Gillette, and Mackie (1987) and Gertler and Hubbard (1990).
16. While both book-value and market-value measures are subject to criticism, market-value measures of debt burdens are generally superior for measuring bankruptcy risks because they reflect inflation and other factors that influence the value of alternative claims on the firm. See, e.g., Bernanke and Campbell (1988) and Warshawsky (1991).

During inflationary periods, book-value measures tend to overstate the burden of debt and to understate the value of a firm's assets. The debt burden may be overstated because with inflation part of the interest rate reflects a return of principal, not a real cost to the firm. As a result of inflation, new debt can be issued without increasing the effective debt burden of the firm; some new debt would merely represent a rollover of the portion of the real principal that must be repaid, rather than a net issuance of new debt. In addition, to the extent that inflation is higher than anticipated, the burden of a given amount of debt falls because real income is transferred from bondholders to shareholders. Book-value ratios also understate the value of the firm's assets because traditional accounting measures of asset values are based on the historical price of the asset, not on its current market (replacement) price. In addition, because book-value debt to asset ratios do not reflect changes in equity values, they may be misleading indicators of the true burden of debt, especially during periods (such as the 1980s) with large increases in stock prices.

While market-value measures of the firm's debt and equity reflect adjustments for inflation and for other changes in the market value of the firm and its securities, they also may be criticized. First, market-value measures generally are estimated rather than directly observed. One approach for estimating the market value of equity and debt, for example, is to capitalize dividend and interest payments, respectively. The Federal Reserve market value ratio shown in Figure 1.5 is a more sophisticated measure, but it also relies on estimates of equity and debt values. Second, market-value ratios are inaccurate if stock market prices do not reflect fundamental values.

17. See, e.g., Shoven (1987) and Auerbach (1989). Share repurchases are discussed further in Chapters 8 and 13.
18. See the evidence in Shoven (1987) and Auerbach (1989).
19. Estimates are based on data for dividends and buybacks from the COMPUSTAT II database, Standard and Poor's COMPUSTAT Services, Inc. Assuming the corporate AAA bond interest rate for all years, the figures represent the maximum interest properly attributable to the increase in share repurchases because they assume that (1) repurchases were financed completely by debt, and (2) the additional debt remains outstanding during the 1980s. The elimination of the capital gains exclusion by the 1986 Act reduced the attraction for investors of share repurchases, since the gain component of the distribution is no longer generally taxed at preferential rates. Share repurchases continued strong through 1989, but declined in 1990.
20. Similarly, leveraged buyouts (LBOs), which replace substantial equity with debt, also may have contributed to the increase in corporate debt during the 1980s. The dollar value of completed mergers and acquisitions in the United States rose at an annual rate of 14.3 percent between 1981 and 1989. The LBO share of this activity rose 8.6 percent in 1983 to 22.7 percent in 1986, but receded to 18.4 percent in 1989 (excluding RJR Nabisco), dropping sharply to 9.3 percent in 1990. (Source: Mergers and Acquisitions, Almanac and Index, May-June 1985-1991). By the end of 1988, outstanding LBO debt was estimated to be about 20 percent of the (book) value of outstanding corporate bonds or more than 9 percent of the (book) value of total nonfinancial corporate debt (based on data from the Federal Reserve Board's Flow of Funds Accounts,

Financial Assets and Liabilities, Year End (1967-1990), hereinafter cited as Flow of Funds Accounts). See Gertler and Hubbard (1990)).

21. See, e.g., Warshawsky (1991).

22. See Friedman (1990) and Gertler and Hubbard (1990).

23. Potential nontax benefits of debt finance are discussed in Chapter 13. See also Jensen (1986) and Gertler and Hubbard (1990).

24. See Chapter 13 and Gordon and Malkiel (1981).

25. The Congressional Research Service estimates that the shareholder level effective Federal income tax rate on dividends is 32 percent, compared to 11 percent or less on capital gains attributable to retained earnings. See Gravelle (1991).

26. This assumption is controversial, since not all economic models of the effects of taxation on dividend payments maintain that nontax benefits are associated with dividend payments. There are two leading explanations of why corporations continue to pay dividends in spite of the greater investor level tax burden on dividends than on capital gains attributable to retained earnings or share repurchases: the "traditional view" and the "new view." The "traditional view" asserts that dividends offer nontax benefits to shareholders that offset their tax advantage. Accordingly, dividend taxes distort payout decisions and raise the cost of capital. The "new view" assumes that dividend payments offer no nontax advantages to shareholders and that corporations have no alternative to dividends for distributing funds to shareholders. Under this assumption, dividend taxes reduce the value of the firm, but do not affect firms' dividend or investment decisions. This Report adopts the framework suggested by the "traditional view." The two approaches are discussed in more detail in Chapter 13.

27. These studies are discussed in Section 13.B.

28. The 1970 data in the text are from Shoven (1987). The 1989 and 1990 data are from Department of the Treasury calculations based on tabulations of the Standard and Poor's COMPUSTAT Industrial and Research files.

29. The effect of taxation on savings is uncertain because changes in the after-tax rate of return have an ambiguous effect on savings. A higher after-tax return makes future consumption cheaper than foregone present consumption. This substitution effect encourages households to reduce present consumption and increase savings. However, a higher after-tax return also allows a given level of future consumption to be reached with less savings today. This second effect, called the income effect, reduces saving. Because the substitution effect of a rise in the after-tax return increases saving, while the income effect reduces saving, the net effect of a rise in the after-tax return is an empirical question.

30. As noted in note 29, the net effect of changes in the after-tax rate of return on saving is difficult to determine because it depends on opposing income and substitution effects. There is less theoretical uncertainty about the direction of the effect of capital taxation on investment. The distinction between saving and investment is an important one in an analysis of corporate taxation. In an economy without international trade and investment flows, national saving equals national investment, and the average cost of capital summarizes tax incentives to save as well as to invest. International capital flows break the equivalence of domestic saving and investment, however. In a world with perfect international capital mobility, incentives for domestic investment would be governed by the pre-tax return needed to cover taxes and the worldwide opportunity cost of funds. At the same time, domestic saving would depend on the after-tax return earned by savers from investing at the worldwide rate of return. Hence, domestic investment depends on domestic corporate level taxes, while domestic saving depends on domestic individual level taxes.

31. U.S. Department of the Treasury, Tax Reform for Fairness, Simplicity, and Growth (1984) (hereinafter cited as Treasury I), Vol. 2, pp. 135-144 and The White House, The President's Tax Proposals to the Congress for Fairness, Growth, and Simplicity (1985) (hereinafter cited as The President's 1985 Proposals), pp. 120-129. See also U.S. Department of the Treasury, Blueprints for Basic Tax Reform (1977) (hereinafter cited as Blueprints).

32. See Appendix B.

33. See, e.g., McLure (1979).

34. So-called partial integration (referred to in this Report as distribution-related integration) has been viewed as a compromise between the passthrough ideal and considerations of administrability. A conventional definition of full integration

is given in McLure (1979), p.3: "...income earned at the corporate level, whether distributed or not, would be attributed to shareholders, as in a partnership, and taxed only at the rates applicable to the incomes of the various shareholders."

35. Appendix C discusses the effect of rate relationships on integration proposals.

36. For general discussion of economic benefits of neutrality in the taxation of capital income, see Institute for Fiscal Studies (1978) and Bradford (1986).

37. See Sections 2.D and 4.F.

38. This Report also does not generally address tax distortions created by inflation.

39. Under a corporate cash-flow tax, corporations would be taxed on the net cash flow from their business activities. Corporate cash-flow taxes have generally been advanced as part of an overall restructuring of the tax system that would replace the individual income tax with a consumption or cash-flow individual tax. See Institute for Fiscal Studies (1978), Aaron and Galper (1985), and Bradford (1986). Recently, however, some economists have proposed cash-flow taxes on businesses, while the current income tax rules would be maintained at the individual level. See, e.g., King (1987), Feldstein (1989), and Hubbard (1989).

Under one corporate cash-flow tax proposal, a corporation would determine its tax base by subtracting from its receipts from sales of goods or services its cost of purchasing real goods and services for production. No deductions for financing investments would be allowed; that is, neither dividends nor interest payments would be deductible. Several significant changes would be required to convert the current corporate income tax base to a cash-flow tax base, including replacing depreciation deductions with a deduction for the cost of capital assets in the year of acquisition (expensing), and eliminating corporate investment interest deductions. Other ways to define the base of a corporate cash-flow tax are discussed in Institute for Fiscal Studies (1978) and King (1987).

Proponents of a cash-flow tax emphasize that, because the initial purchase of assets would be deductible, the system would generate a zero marginal effective tax rate on investment. In effect, the tax system would not distort the cost of capital investment decisions. Income generated in the corporate sector, however, would continue to bear a tax at the individual level. In contrast, noncorporate business income would face no tax at the margin if it were taxed on a cash-flow basis. Hence, a bias against investment in the corporate sector would still exist.

Because interest payments would not be deductible, the tax advantage that debt enjoys under the current system would be eliminated, but a cash-flow tax would not achieve neutrality with respect to choice of finance. Rather, under the reasonable assumption that the marginal individual tax rate on dividends exceeds the marginal effective accrual tax rate on capital gains, retained earnings would have an advantage over either debt or new equity as a source of corporate finance.

40. See generally Treasury I.

Part II

Introduction

1. While the prototypes discussed in this Part and in Part IV contain considerable technical detail, they do not provide a comprehensive summary of technical changes that would be required. For example, the prototypes do not address the effect of an integration system on groups of corporations filing consolidated returns. We concluded, consistent with the approach to consolidated return matters under the current corporate tax system, that consolidated return issues are better addressed after a basic integration approach is selected.

2. The distribution-related integration systems of several major U.S. trading partners are described in Appendix B.

Chapter 2

1. Peel (1985) also proposes a dividend exclusion system. While Peel's proposed system resembles the dividend exclusion prototype discussed here (e.g., in allowing shareholders to exclude dividends only to the extent of income that has been taxed fully at the corporate level), there are significant differences. For example, Peel's proposed system would track taxable

income rather than taxes paid, would extend the benefits of integration to foreign shareholders by statute, and would treat foreign taxes like U.S. taxes in determining the extent to which a corporation's income has borne tax.

From 1954 to 1986, the Code provided a very small exclusion for dividends received by individuals. Immediately preceding repeal, IRC § 116 provided an exclusion of up to \$100 of dividends received (\$200 on a joint return).

2. Although a detailed treatment of the financial accounting consequences of adopting an integrated system is beyond the scope of this Report, and the financial accounting authorities have never addressed the integration prototypes developed in this Report, a few preliminary observations can be made. Because the dividend exclusion prototype generally retains the current rate structure and rules for calculating corporate income subject to tax, adoption of the prototype should not significantly change corporations' provision for income tax expense or the determination of taxes currently payable or payable at a future date. Of course, the economic effects of moving to an integrated tax system, e.g., changes in corporations' distribution policies and capital structures, would be reflected in financial statements.

3. This is similar to an imputation credit system that taxes corporate income at a 34 percent rate and allows shareholders imputation credits at the individual shareholder rates.

4. An imputation credit system that denies refundability of imputation credits to tax-exempt shareholders achieves the same results. See Section 11.E.

5. An imputation credit system that relies on a shareholder credit limitation rather than a compensatory tax reaches the same result. See Section 11.B.

6. An imputation credit system reaches the same result if foreign taxes are not added to the shareholder credit account. See Section 11.D.

7. In an imputation credit system, this result can be achieved by denying refundability of imputation credits to foreign shareholders and continuing to impose withholding tax. See Section 11.E.

8. For simplicity, Table 2.1 (and the corresponding tables in Chapters 3, 4, and 11) refer to the tax imposed on a foreign investor's noncorporate equity income as a withholding tax, t_{WN} , although the method and rate of taxation actually vary depending on the type of income. Very generally, a foreign investor is taxed on income from an equity investment in a noncorporate business as if the foreign investor had earned directly the income earned by the business. A foreign investor is generally subject to tax at rates applicable to U.S. persons on income that is "effectively connected" with a U.S. trade or business. A partnership generally must withhold tax from a foreign partner's distributive share of effectively connected income under IRC § 1446. A partnership also withholds tax on a foreign partner's distributive share of dividends, interest, and other income to the extent required by IRC § 1441.

9. A compensatory tax is used in some foreign imputation credit systems, e.g., the United Kingdom, France, and Germany, to ensure that corporate level preferences are not extended to shareholders. See Appendix B.

10. Because the prototype treats AMT as corporate taxes paid, it does not treat as taxes paid the portion of a later year's regular taxes that are offset by the AMT credit allowed by IRC § 53.

Example. A corporation earns \$100 of preference income. The corporation's regular tax is \$0, and its AMT is \$20. The addition to the EDA is \$38.82 ($(\$20/.34) - \20). This is the amount of hypothetical income that would be left for distribution if the corporation had earned taxable income of \$58.82 and paid \$20 of regular tax at the 34 percent rate ($58.82 \times .34 = 20$).

11. In mathematical terms, for each dollar of taxes paid, the corporation can add $(1/t) - 1$ to its EDA, where t is the corporate tax rate. This formula also can be expressed as $(1 - t)/t$.

The graduated rates set forth in IRC § 11(b) for corporations with incomes of less than \$75,000 would continue to be available. Converting the entire amount of taxes paid at a 34 percent rate provides a simple rule and should not harm most corporations, because the benefit of graduated rates begin to phase out for corporations with taxable incomes greater than \$100,000. It would, however, be possible to modify the EDA conversion formula to reflect graduated rates. One possibility is to build the graduated rate structure into the EDA formula for corporations with taxable incomes of less than \$100,000 by permitting conversion of the first \$7,500 of taxes paid at the 15 percent rate (into \$42,500 of EDA) and conversion of

the second \$6,250 of taxes paid at the 25 percent rate (into \$18,750 of EDA). These amounts would be reduced for corporations in the phaseout range.

12. **Example.** In year one, a corporation reports \$100 of income and pays \$34 of tax. The corporation's EDA balance is \$66, and it pays an excludable dividend of \$66. In year two, the corporation incurs a net operating loss of \$50 and files a claim for refund of \$17. Making that adjustment retroactive to year one would require adjusting shareholders' incomes to reflect a taxable dividend of \$33. Because this is impractical, the prototype requires that the refund in the year of the adjustment be carried forward to be applied against future corporate taxes.
13. Payment of a refund when the EDA balance is exhausted would, in effect, refund corporate taxes that have already been used to qualify distributions as excludable by shareholders; only by requiring a negative balance in the EDA could this be compensated for in later years.
14. We rejected the alternative of permitting refunds and NOL carrybacks to create a negative EDA. If such an approach were adopted, a negative EDA would be increased by subsequent payments of corporate tax. In addition, a corporation with a negative EDA would be required to pay additional tax to increase its EDA to zero upon certain events, e.g., upon liquidation.
15. While a 100 percent dividends received deduction could be extended to all corporate shareholders to defer completely taxation of corporate preference income until it is distributed out of corporate solution, it would add approximately \$400 million to the revenue cost of the dividend exclusion prototype. Because of the additional complexity that would arise from a partial dividends received deduction under an imputation credit system, we make a different recommendation under that system. See Section 11.B.
16. As under current law, hybrid instruments and derivative products (e.g., convertible debt and options may allow a tax-exempt or foreign investor to capture the portfolio benefits of holding stock while avoiding corporate level tax.
17. One anti-streaming mechanism is inherent in the prototype. Because all dividends paid reduce any positive balance in the EDA, a corporation cannot simultaneously pay excludable dividends on one class of stock and taxable dividends on another. The imputation credit system, described in Chapter 11, allows greater flexibility in attaching shareholder level tax credits to dividends and, as a result, demands additional anti-streaming restrictions.

Requiring dividends to reduce the EDA does not prevent all streaming, however. For example, excludable dividends can be paid to taxable shareholders to the extent of the EDA and thereafter all taxable dividends can be paid to tax-exempt shareholders. Further, complex corporate structures and corporate reorganization (either acquisitive or divisive) also might be used to stream excludable dividends by isolating or shifting shareholders' interest in a corporation's EDA. If necessary, anti-abuse rules can be formulated to prevent such arrangements.
18. IRC § 246 (which governs corporations' eligibility for the dividends received deduction) may provide a model for developing related rules.
19. IRC § 1059 limits the ability of corporate shareholders to strip dividends by claiming the dividends received deduction with respect to distributions more properly treated as a return of capital. It does so by requiring stock basis to be reduced to the extent of the dividends received deduction with respect to extraordinary dividends paid within 2 years of an acquisition of stock. The appropriate scope of an IRC § 1059-type basis adjustment will depend on the treatment of capital gains under integration. See Chapter 8.

As discussed in the text under "Corporate Shareholders," an excludable dividend received by a corporate shareholder increases the recipient's EDA. Consideration should be given to whether additional anti-streaming rules are necessary to prevent streaming through the shifting of EDA balances among corporations.

20. Under IRC § 305(b)(2), a distribution (including a deemed distribution) by a corporation of its stock is treated as a dividend if the distribution (or a series of distributions of which distribution is a part) has the result of (1) the receipt of money or other property by some shareholders, and (2) an increase in the proportionate interests of other shareholders in the assets or earnings and profits of the corporation. For example, assume a corporation issues two classes of common stock in an attempt to stream excludable dividends to certain shareholders. The first class pays excludable dividends and is intended to be held by taxable persons. The second class pays stock dividends (or receives an increased interest in the corporation's assets) and is intended to be held by tax-exempt persons. In such a case, IRC § 305 would impute dividends on the second class of stock and the corporation's EDA would be reduced accordingly.

Similarly, IRC § 305(c) authorizes the Department of the Treasury to issue regulations treating a wide variety of transactions as constructive distributions to any shareholder whose proportionate interest in the corporation's assets or earnings and profits is increased thereby. For example, IRC § 305(c) would prevent a corporation from issuing preferred stock on which a redemption premium substitutes for dividends.

21. **Example.** Corporation X is owned by a tax-exempt shareholder, and its only asset is a \$100 EDA balance, e.g., because it previously distributed preference income and retained only enough cash to pay the tax liability when the preference subsequently turned around. Corporation Y is owned by taxable shareholders and has substantial preference income and cash but a \$0 EDA balance. Corporation Y acquires corporation X in a tax-free merger described in IRC § 368(a)(1)(A), and subsequently uses X's EDA balance to distribute \$100 of Y's cash as excludable dividends. If Y's \$0 EDA balance is attributable to deferral preferences, it will ultimately owe tax when the preferences turn around. However, the acquisition of X's EDA enables Y to defer tax on the preference income that otherwise would have resulted from Y's current distribution of dividends.
22. The American Law Institute, Reporter's Memorandum No. 3, (1991), pp. 7-8, makes a similar recommendation in discussing an integration proposal involving maintenance of a "taxes paid account" at the corporate level.
23. In the interim, the rules of IRC § 269 could be applied to prevent the most obvious tax-motivated acquisitions.
24. Similar issues arise under the shareholder allocation and imputation credit prototypes, but we do not discuss them separately in Chapters 3 and 11. The dividend exclusion prototype taxes corporate equity income once at a 34 percent rate, regardless of the tax rate of the shareholder. Thus, if an interest disallowance rule applied, it should apply regardless of whether the dividends paid on the stock are excludable or taxable. While excludable dividends bear a superficial similarity to tax-exempt interest under IRC § 103, one level of tax on the earnings used to pay the dividend has been collected. Similarly, taxable dividends paid, for example out of preference income, to a taxable shareholder also bear one level of tax, although at the shareholder's rate. Thus, if an interest disallowance rule were adopted, it would be inappropriate to apply it only to the extent of excludable dividends. On balance, this Report does not recommend developing rules to deal with the potential rate arbitrage of equity holders borrowing from low rate or tax-exempt lenders for either excludable or taxable dividends. See note 25.
25. As under current law, the general deductibility of interest permits significant rate arbitrage through the issuance of debt by taxable issuers to tax-exempt and foreign lenders. The relative importance of the rate arbitrage potential of borrowing to purchase corporate stock may be less in an integrated system that does not change the treatment of interest generally. In contrast, CBIT generally eliminates businesses' ability to pay interest to tax-exempt and foreign lenders without the payment of one level of tax. Thus, in CBIT, we found it appropriate to eliminate investor level rate arbitrage through borrowing as well. Compare IRC § 246A.
26. No other country with an integrated system has adopted this approach, however.
27. If such treatment of foreign taxes were permitted, special rules would be required to ensure that appropriate amounts are added to the EDA when foreign tax rates exceed the U.S. rate. If the foreign tax rate is less than the U.S. rate, foreign taxes paid could be converted into the appropriate EDA balance by applying the formula set forth in Section 2.B.

Example 1. A corporation has \$100 of foreign source income and pays \$20 in foreign taxes. After applying the IRC § 904 limitation, the corporation would be entitled to credit all \$20 of foreign taxes against its U.S. tax liability of \$34. The U.S. residual liability would be \$14, which would convert into a \$27 ($\$14 / .34 - \14) addition to the EDA. The \$20 of foreign taxes paid would convert into a \$39 ($\$20 / .34 - \20) addition to the EDA. The total EDA would be \$66, which would enable the corporation to distribute its after-tax earnings of \$66 as excludable dividends.

However, if foreign tax rates exceed U.S. tax rates, the foreign taxes cannot be converted into an EDA balance using the formula set forth in Section 2.B. In that case, the foreign taxes must be converted using the higher foreign tax rate.

Example 2. A corporation has \$100 of foreign source income and pays \$40 in foreign taxes. After applying the IRC § 904 limitation, the corporation would be entitled to credit \$34 against its U.S. tax liability of \$34. The U.S. residual liability would be \$0. It would be inappropriate, however, to add \$66 to the EDA, because the corporation has only \$60 (\$100 income - \$40 foreign taxes) of after-tax earnings to distribute. Adding \$66 rather than \$60 would permit the distribution of \$6 of U.S. source preference income without shareholder level tax. Thus, the amount to be added to the

EDA should be limited to \$60, which can be accomplished by applying the EDA formula to actual foreign taxes paid using the higher foreign rate ($\$40/.4 - \40).

This approach would create some complexity at the corporate level, because it would require separate tracking of foreign taxes paid and foreign tax rates. The alternative of tracing foreign income and adding to the EDA foreign income less foreign taxes is likely to be at least as complex.

28. A low taxable income is not necessarily inconsistent with wealth. For example, a low-bracket individual may have large amounts of income from tax-exempt sources, e.g., tax-exempt bond interest. Alternatively, a low-bracket individual who is retired may have a small income but a large accumulation of wealth. That is, individuals may prefer to maintain a level of consumption over their lifetime, and thus reduce consumption during high-income working years in order to be able to maintain consumption during low-income retirement years. See, e.g., Ando and Modigliani (1963).

29. The credit formula is: $\text{Credit} = (\text{DIV}/.66) \times (.34 - t)$, where DIV is the dividend and t is the shareholder's marginal rate. This credit formula is designed to replicate the excess credit under an imputation credit system, i.e., the difference between the imputation credit ($.34 \times (\text{DIV}/.66)$) and the amount of shareholder tax due on the grossed up dividend at the shareholder rate ($t \times (\text{DIV}/.66)$).

30. Alternatively, relief for low-bracket shareholders also might take the form of a deduction. The credit formula could be converted into a deduction formula by dividing the credit by the shareholder tax rate: $[(\text{DIV}/.66) \times (.34 - t)]/t$, where DIV is the net dividend and t is the shareholder's marginal rate. Thus, a shareholder in the 15 percent bracket would be entitled to a deduction of \$127 ($\$66/.66 \times .19/.15$).

31. A corporation's EDA would be allocated among shareholders in proportion to the amount of other assets distributed to them.

32. The policy underlying the reorganization provisions is that imposition of tax is inappropriate if a corporate reorganization merely effects a readjustment of shareholders' continuing interests in corporate property under modified corporate forms. This policy applies equally under the prototype, because it reflects a judgment about when income should be recognized under a realization-based tax system that does not require corporate assets or stock to be marked to market, not a judgment about whether two levels of tax should be imposed on recognized corporate income.

33. Under current law, earnings and profits of the distributing corporation in a divisive reorganization that qualifies as a reorganization under IRC § 368(a)(1)(D) are divided between the distributing corporation and the controlled corporation based on the relative fair market value of their assets.

34. Under current law, nonliquidating distributions to shareholders are treated as dividends to the extent paid out of the corporation's post-February 28, 1913, accumulated earnings and profits or its earnings and profits for the current taxable year. The earnings and profits rules may be viewed as serving two principal functions with respect to dividend taxation. First, the earnings and profits rules may be seen as a mechanism to assure that corporate preferences are not extended when preference income is distributed to shareholders. Second, the rules may be seen as a mechanism to distinguish whether a distribution represents a distribution of income earned on the shareholder's investment or a return of that investment.

35. IRC § 301(c).

36. See, e.g., Andrews (1956), Blum (1975), and American Bar Association (1986).

37. Earnings and profits also are relevant in contexts other than determining dividend taxation. Earnings and profits are relevant, for example, in determining the extent to which gain on a disposition of IRC § 306 stock is recaptured as ordinary income, whether certain corporate divisions qualify for tax-free treatment under IRC § 355, the amount of taxes paid by a foreign corporation that under IRC § 902 are credited to its 10 percent corporate shareholder upon receipt of a dividend, the amount of Subpart F income that must be currently included in income by a United States shareholder of a controlled foreign corporation, whether an S corporation with substantial passive income is subject to entity level tax on such income under IRC § 1375 or whether such income causes the termination of S corporation status under IRC § 1362(d)(3); the amount of any basis adjustments in the stock of consolidated subsidiaries pursuant to the consolidated return regulations, and the amount of the adjusted current earnings adjustment for AMT purposes. In some contexts, it is possible to eliminate references to earnings and profits or to devise alternatives that are simpler. Nevertheless, in other contexts—especially in the rules governing the taxation of foreign income—developing simple alternatives may prove more difficult. The benefit of

eliminating the earnings and profits rules for purposes of dividend taxation is considerably reduced if alternatives are not found for the rules in other contexts.

38. Recently, the American Law Institute Reporter circulated a draft memorandum that would eliminate earnings and profits as part of its distribution-related integration proposal. American Law Institute, Reporter's Memorandum No. 3 (1991), p. 5.

39. Just as under current law, however, the connection between earnings and profits and the economics of shareholder investment is severed, however, by sales of stock and other transactions or events increasing or decreasing shareholder basis without adjusting earnings and profits. Preserving the connection would require earnings and profits accounts to be maintained and adjusted on a per share basis. Thus, for example, a seller of stock in a corporation with retained earnings would recognize dividend income to the extent of the earnings and profits attributable to such stock and the earnings and profits account for the stock would be reduced to zero. This system would not be feasible for actively traded stock. Accordingly, the earnings and profits rules may yield arbitrary and incorrect results from the shareholder's perspective. The alternative rules are likely to be no more accurate in distinguishing between income distributions and returns of capital because they also do not take into account changes at the shareholder level. Indeed, by eliminating earnings and profits as a limitation on dividend taxation, the alternative rules would tend to increase the likelihood of imposing dividend taxation on a distribution that economically is a return of shareholder investment.

40. For a discussion of the equivalence of deducting the cost of an investment and exempting investment income from tax, see Graetz (1979), Warren (1975), Andrews (1974), and Brown (1948).

Chapter 3

1. If income is not taxed at the corporate level (because of tax preferences or foreign tax credits), there is no additional tax burden on retained earnings, and therefore corporations will tend to retain preference income. Under the dividend exclusion prototype, as well as under the current system, retained preference income is taxed at the shareholder level only when the stock is sold. To the extent that retaining preference income increases the value of stock, it also increases the capital gain realized on the sale. Thus, distribution-related integration treats retained corporate preference income more favorably than distributed preference income.

2. Because the shareholder allocation prototype would generally continue to tax the corporation in the same manner as under current law, it should not significantly change a corporation's financial statement provision for income tax expense, taxes currently payable, and taxes payable at a future date. The prototype's denial of carrybacks for net operating losses and removal of the corporate AMT will, however, be reflected in the reporting of corporate tax liability for financial accounting purposes.

The denial of carryback treatment for net operating losses may increase the provision for income tax expense in certain circumstances. For financial accounting purposes, when a operating loss can and will be carried back, the tax effects of such carryback generally increase net income, or reduce the net loss, during the loss period. See Accounting Principles Board, Opinion No. 11 (1967), paragraph 44 and Financial Accounting Standards Board, Statement No. 96 (1987), paragraph 52. The tax effect of the NOL carryback (which is included in the determination of net income or loss) is based on income, or loss, reported for financial accounting purposes rather than for tax purposes. The refund of taxes expected as a result of the carryback is recorded as a current asset. Any difference between the tax loss and financial accounting loss carryback benefit is recorded in the deferred tax account. The shareholder allocation prototype would preclude corporations from recognizing the benefits of NOL carrybacks.

Because the shareholder allocation prototype eliminates the corporate AMT, it would reduce the provision for tax expense in those limited situations in which a corporation would otherwise calculate a hypothetical AMT liability. For financial accounting purposes additional tax expense is only provided with respect to the corporate AMT when the application of the AMT rules to financial accounting income would result in a hypothetical AMT liability, i.e., to the extent AMT relates to deferral items no additional tax expense is recorded for financial statement purposes. The corporate AMT also affects the financial statement allocation of tax expense among taxes currently payable and taxes payable at a future date. Accordingly, the shareholder allocation prototype also could affect these allocations.

3. Because both the dividend exclusion and shareholder allocation prototypes retain the corporate interest deduction, interest paid to tax-exempt organizations and foreign investors generally escapes U.S. tax, while corporate equity income distributed to such investors is subject to at least one level of U.S. tax. Achieving equal treatment of debt and equity under a shareholder allocation system would require a corporation to allocate its taxable income to both bondholders and shareholders each year,

whether or not interest or dividends were paid. A bondholder, like a shareholder, would be entitled to a credit for the corporate level tax on the income allocated, and the bondholder's basis would increase by the after-corporate tax amount of income allocated. Tax-exempt and foreign bondholders would not be entitled to claim refunds of tax credits. Unlike current law, which requires accrual-basis bondholders to include interest in income whether paid or not, a shareholder and bondholder allocation system might limit bondholders' interest income to the amount of the corporation's earnings.

Such a system would require rules for allocating corporate earnings to classes of debt as well as stock. The allocation rules in such a system should provide that earnings would be allocated first to interest payable or accrued on debt, and any remaining income would then be allocated to equity. One method for allocating income to traditional debt instruments would determine the maximum amount of income to be allocated to a given class of debt based on the current law rules for accrual-basis taxpayers (or for holders of bonds with original issue discount). Available earnings could then be allocated to each class of debt according to its priority, i.e., first to senior debt, then to senior subordinated debt, and then to subordinated debt. For example, assume that a corporation has \$100 of earnings and three classes of debt. The first class of debt is bank debt, senior to the other two classes. The second and third classes are of equal priority. The interest accruing on the bank debt is \$80; the interest accruing on the second class is \$30; and the interest accruing on the third class is \$10. Of the corporation's \$100 of earnings, \$80 would be allocated to the bank debt. The remaining \$20 would be allocated proportionately between two classes of junior debt, so that \$15 (or \$20 multiplied by $\frac{30}{40}$) would be allocated to the second class, and \$5 (or \$20 multiplied by $\frac{10}{40}$) would be allocated to the third class. No earnings would be allocated to equity.

4. For a more detailed examination of problems involved in administering a widely held passthrough entity, including reporting issues, allocating items (such as built-in gain on contributed property) to members, and collection issues, see Department of the Treasury, Widely Held Partnerships (1990). Proposals are pending in the Congress to modify the conduit treatment of certain large partnerships. Under H.R. 2777 and S. 1394, 102d Congress, 2d Session (1991) the income of partnerships with at least 250 partners would be consolidated at the partnership level, resulting in a reduction in the number of separate items that would be reported to partners. Audit adjustments would result in a single, current year adjustment to partnership income, rather than adjustments to the returns of prior year partners. Under these bills, the tax administration of large partnerships would move toward an entity approach and away from the aggregate approach that dominates current law partnership rules.

In 1966, Canada's Carter Commission recommended a modified shareholder allocation integration system, but Canada did not adopt the recommendation. See Royal Commission on Taxation (1966). Similarly, the United States did not adopt the Blueprints proposal for a shareholder allocation integration system. In 1971, the Federal Republic of Germany's Tax Reform Commission rejected a shareholder allocation integration system because of administrative complexity. See Gourevitch, (1977), pp. 48-54. In addition, other countries have implicitly rejected shareholder allocation integration by adopting distribution-related integration systems, although most countries have passthrough entities that are taxed under a shareholder allocation integration approach.

5. For ease of computation, the discussion and examples in this chapter use a 31 percent corporate tax rate. The shareholder allocation prototype could retain the current 34 percent corporate tax rate but provide credits to shareholders at a 31 percent rate if maintaining the credit rate differential were desirable or necessary. The revenue estimates set forth in Chapter 13 assume a 34 percent corporate rate. Maintaining the corporate tax rate at 34 percent would require an adjustment in the amount of tax passed through to shareholders to allow shareholders a tax credit no greater than the maximum 31 percent individual rate. For example, if a corporation reported \$100 of taxable income and owed \$34 of tax, only \$31 of tax would be passed through to shareholders. Retaining the rate differential would necessitate numerous calculations to transform corporate level preferences into shareholder level preferences; for example, if a corporation also had a \$10 low-income housing credit, the shareholders should be entitled only to 31/34 of the credit.

6. The additional economic income sheltered by the credit, absent an upward adjustment of the shareholder's basis, will be taxed upon distribution by the corporation or sale of the shareholder's stock.

If the corporation had a \$40 credit, shareholders would be allocated \$31 of tax credits, and the \$9 excess credit would be carried forward at the corporate level to the extent permitted under the Code. As discussed above, a shareholder with tax liability less than the amount of credit allocated to him could use excess credits against other income. As in the imputation credit prototype discussed in Chapter 11, consideration might be given to providing a carryforward at the shareholder level for unused credits. See Chapter 11, note 33.

7. Example. A corporation earns \$100 of taxable income and pays \$31 of corporate tax. The corporation's shareholders increase their basis in their stock by \$69, the after-tax income of the corporation. This achieves the same result as a partnership that earns \$100 of taxable income and distributes \$31 in cash to partners to pay the tax.

8. Because the shareholder allocation prototype treats distributions first as a nontaxable return of capital to the extent of shareholder basis and second as capital gain to the extent of any excess over basis, the earnings and profits rules are not needed. Compare note 14, below.

9. To mitigate somewhat the effect of eliminating loss carrybacks, consideration might be given to extending somewhat the carryforward period, for example, from 15 to 18 years, so the total period in which corporate losses could be used would not be reduced under shareholder allocation.

10. Corporations with more complicated capital structures may require more complicated allocation provisions. See Section 3.F.

11. While noting that corporate level payment would facilitate payment of tax, Blueprints did not include such payment in its model system. See Blueprints, pp. 73-74. Compare IRC § 1446, which requires withholding by partnerships on income that is effectively connected with a trade or business in the United States and that is allocable to a foreign partner.

12. If passthrough of losses were permitted, corporate losses, like partnership and S corporation losses, could be used by shareholders to the extent of share basis. Losses in excess of share basis might be carried forward at the shareholder level. See IRC § 704(d).

13. One method for eliminating most preferences would require corporations to allocate AMTI, rather than taxable income, to shareholders. Each corporation would thus impute to shareholders the full amount of both taxable and preference income (at least to the extent preference items are included in AMTI), regardless of whether the corporation was subject to the AMT.

Example. Assume that a corporation has \$100 of taxable income and \$30 of tax-exempt interest as its only preference item. The corporation would not be subject to the AMT, because the tentative AMT (\$26) would not exceed the regular corporate level tax (\$31). Nevertheless, the corporation would allocate \$120 of income among its shareholders.

Under this approach, corporations would continue to pay corporate level tax as under current law, at either the regular or AMT rate, whichever is applicable. Shareholders would be entitled to credit both corporate level tax and AMT but would not be entitled to credit corporate tax to the extent it was offset in later years by the AMT credit.

The following example illustrates this method. The example assumes a 31 percent corporate and shareholder rate and a 20 percent corporate AMT rate.

	Year 1	Year 2	Year 3
Corporate Level Tax Calculation			
Corporate taxable income	\$100	\$100	\$164
Corporate preference income	200	0	0
AMTI	300	100	164
Tentative AMT	60	20	33
Regular tax	31	31	51
AMT	29	0	0
AMT credit	0	11	18
Net corporate tax payable	60	20	33
Shareholder Level Tax Calculation			
Shareholder income	\$300	\$100	\$164
Shareholder tax	93	31	51
Credit for corporate taxes paid	60	20	33
Net shareholder tax payable	33	11	18

In this case, a total of \$175 of tax has been paid on \$564 of economic income (a 31 percent rate).

This approach would effectively eliminate corporate level preferences, whether or not distributed, by taxing corporate preference income currently at shareholder rates. A shareholder in the 31 percent bracket would generally be liable for additional shareholder level tax to the extent that corporate AMTI exceeded corporate taxable income. Thus, corporate level preferences essentially would be taxed the same as corporate level taxable income, unless the absence of a corporate level

tax were significant. For example, a tax-exempt shareholder would not owe additional shareholder level tax, with the consequence that allocated preference income would be tax-exempt (except to the extent of the corporate AMT).

14. The following approach would tax preference income to shareholders only upon a distribution or a sale of stock. Corporations would track taxes paid, which would include payments of regular tax and AMT, as well as any AMT credits for AMT paid in prior years. An amount of deemed income equal to the amount of income that would give rise to the actual amount of corporate tax paid if tax had been imposed at a 31 percent rate would be allocated among shareholders. Thus, each \$1 of regular tax or AMT would give rise to \$3.23 of deemed income ($\$1/.31$). Shareholders would report the deemed income and would be entitled to a credit for corporate taxes paid. Because this approach treats the amount of income that would be allocated to shareholders as if it had been taxed at the maximum corporate rate, no shareholder would owe additional tax on corporate level preferences currently and lower bracket shareholders could use excess credits to offset other tax liability. Share basis would increase by the amount of deemed income reported to the shareholder, net of the credit for taxes paid.

The following example compares the treatment of two corporations, only one of which, corporation B, is an AMT taxpayer. It assumes a 31 percent corporate rate and shareholder rate and a 20 percent AMT rate.

	Corporation A	Corporation B
Corporate Level Tax Calculation		
Corporate taxable income	\$645	0
Corporate preference income	350	\$1,000
Regular tax	200	0
AMT	0	200
Total corporate taxes paid	200	200
Shareholder Level Tax Calculation		
Shareholder income	\$645	\$645
Shareholder tax	200	200
Credit for corporate taxes paid	200	200
Net shareholder tax payable	0	0

Under this approach, corporations with significant preference income would pay tax at corporate AMT rates, but no additional shareholder level tax would be imposed currently. Additional shareholder tax would be collected only when preference income is distributed or shares are sold. Tax would be collected at that time because share basis is increased only by the amount of the deemed income. Thus, if a corporation has income that is taxed at less than a 31 percent rate, the shareholders' aggregate basis in their shares will be less than the corporation's aggregate earnings available for distribution. When distributions exceed shareholder basis (or when shares are sold for amounts in excess of basis), additional shareholder tax will be paid.

Example. A corporation has \$100 of assets and a single shareholder with a stock basis of \$100. During the year, the corporation earns \$200 of preference income and pays AMT of \$40. The corporation allocates \$129 ($\$40 \div .31$) of income and \$40 of tax credit to the shareholder. The shareholder's basis increases to \$189 (\$100 original basis plus $(\$129 - \$40)$). The corporation has \$260 of assets available for distribution. If the corporation distributes \$260 to its shareholder, the shareholder will recognize gain of \$71, the amount of preference income not previously taxed at 31 percent.

Under this approach, distributed preference income is generally taxed at capital gain rather than at ordinary income rates, because distributions in excess of basis are treated as gains from the sale of stock. In contrast, under current law and under distribution-related integration, only retained preference income (which increases share value) is taxed as capital gains, while distributed preference income is taxed as ordinary income.

In contrast to the treatment of dividend distributions under current law, this method treats distributions first as a return of capital, so preference income is not taxed until share basis is exhausted. This stacking order is not consistent with the dividend exclusion or CBIT prototypes or the imputation credit prototype, described in Chapter 11, which require that distributions in excess of fully-taxed income be treated as taxable distributions of preference income before they are treated as returns of the shareholder's investment. It is possible, however, to conform the stacking order in the shareholder allocation prototype to the stacking in those prototypes. To do so, a corporation would be required to maintain an accumulated earnings and profits account (essentially under the rules of current law). Within the earnings and profits account, the corporation

would maintain a subaccount for fully-taxed earnings and profits (computed by tracking taxes paid, as in the EDA). See Section 2.B. Distributions in excess of the fully-taxed earnings, up to the amount of earnings and profits, would be treated as taxable dividends, rather than a return of the shareholder's investment.

15. **Example.** Assume that a shareholder has a basis of \$10 in stock of a corporation. If the corporation earns \$100 of taxable income and receives \$50 of tax-exempt bond interest in year one, the corporation would pay \$31 in tax. The shareholder would include \$100 in income and would be entitled to offset the \$31 shareholder tax by the \$31 credit for corporate level tax. The shareholder's basis would increase by \$119 (the tax-exempt interest income plus the taxable income, reduced by the amount of taxes paid). Thus, the corporation could distribute its net cash of \$119 without giving rise to shareholder level tax. This basis adjustment differs from the \$150 adjustment that would be made in a partnership because of the \$31 of tax collected at the corporate level.
16. **Example.** Assume that a shareholder invests \$100 in stock of a corporation. The corporation invests the \$100 of contributed capital in an asset that costs \$100. Assume that the corporation earns \$100 and is entitled to expense the asset in year one, rather than depreciating it over its economic life of three years. The deferral preference will reduce the corporation's income subject to corporate level tax in year one to \$0. In years two and three, however, the preference turns around, because the corporation will have more income than it would have if the asset had been depreciated over 3 years. Thus, the corporation's and the shareholder's income in years two and three will be higher.
17. **Example.** A corporation's only income is \$100 of tax-exempt interest on bonds described in § 57(a)(5). Thus, its taxable income is \$0 and its AMTI is \$100. The corporation pays \$20 of AMT. Assume that an individual taxpayer with a 31 percent marginal tax rate holds all the stock of the corporation and has no other income. Disregarding AMT exemption amounts, the shareholder would include the \$100 of corporate AMTI in his own AMTI, and thus would owe individual AMT of \$24. The shareholder could then credit the \$20 of corporate AMT against his own AMT liability, resulting in a net AMT liability of \$4.

If the shareholder had other income, e.g., \$100 of wage income, the shareholder would pay \$31 of regular tax and \$17 of AMT ($\$200 \text{ AMTI} \times .24 = \31). The \$20 of corporate level AMT paid at the corporate level would be creditable to reduce the total tax due from the shareholder to \$28. The shareholder would have an AMT credit of \$17 to use against future regular tax liability but no corporate level AMT credit would be allowed.

18. Permitting shareholders to credit corporate AMT paid against their regular tax liability without including any amounts in shareholder AMTI, in effect, would refund the corporate AMT to taxable shareholders.

Example. The facts are the same as in the example in the preceding footnote. The 31 percent bracket shareholder also has \$100 of wage income. If the AMT paid at the corporate level were creditable against regular tax, but no AMTI were imputed to the shareholder, the shareholder would pay only \$11 of regular tax.

19. One approach would continue to impose the corporate AMT without any current credit to shareholders for corporate AMT paid. Shareholders would benefit from corporate AMT payments only when the corporation made the AMT credit allowed by IRC § 53 to reduce a subsequent year's regular tax liability. The AMT credit would be passed through to shareholders like other credits. This rule would, however, deny integration benefits to shareholders of corporations that are chronic AMT taxpayers, because those corporations may never use their AMT credits. This system also would require modifications to the shareholder basis rules to decrease share basis to reflect the payment of a noncreditable, nondeductible tax.

An alternative rule would impute to shareholders, in addition to the corporation's taxable income, an amount of income based on the corporate AMT paid, and allow shareholders to credit the corporate AMT against their regular tax. The additional income imputed would equal the amount of corporate AMT paid, grossed up at 31 percent.

Example. The facts are the same as in the examples in the preceding two footnotes. Instead of including corporate AMTI in shareholder AMTI, the corporation would allocate \$64.52 of additional income ($\$20/.31$) to its shareholder. The shareholder would then credit the \$20 of corporate AMT against his regular tax liability. Thus, the shareholder's total taxable income would be \$164.52; total tax liability would be \$51; and the shareholder would be allowed to credit the corporate AMT to reduce the tax due to \$31.

This approach is similar to the method described in note 13. Unlike that method, however, this rule imputes a grossed-up amount of income to shareholders only to the extent of corporate AMT paid. As a consequence, it produces erroneous basis

adjustments in the case of deferral preferences, because deferral preference gives rise to partial basis when AMT is paid and subsequently gives rise to the full amount of basis when the preference turns around and generates regular taxable income. The basis adjustments could be corrected by continuing to calculate basis adjustments based on grossed-up taxes paid (rather than taxable income allocated to shareholders). Such alternative basis adjustments would require complex rules, complicated information reporting, and would create basis adjustments the timing of which differ from the timing of income passed through to shareholders.

20. S corporations allocate income items pro rata. An S corporation allocates to each share of stock exactly the same amount of each item arising in a taxable year. This system is simple and administrable; it works well for S corporations because they may not have more than one class of stock. IRC § 1361(c)(4) permits classes of stock in an S corporation to have different voting rights, but other differences generally are prohibited. Thus, the system achieves simplicity by requiring all the stock of an S corporation to possess similar economic rights. An integration proposal that limits all corporations to a single class of stock, however, is neither feasible nor economically desirable. The variety of existing corporate capital structures precludes serious consideration of such a system.

21. IRC § 704(b).

22. Treas. Reg. § 1.704-1.

23. The complex capital account maintenance rules contained in the regulations under IRC § 704(b) illustrate the variety of issues that would have to be addressed. An alternative approach would look to IRC § 305 to impute income to a shareholder whose proportionate interest in the corporation increases as does the holder of class B stock in the example in the text. We do not explore the implications of such an approach.

24. Example. Two shareholders form a corporation and contribute \$100 each. One shareholder receives preferred stock with a liquidation preference of \$100 and a return of 10 percent. The other shareholder receives common stock, which is entitled to the remaining income and assets. Assuming the corporation makes no cash distributions, corporate income would be allocated as follows:

Year	Corporate Income	Allocations		Year-End Capital Accounts	
		Preferred	Common	Preferred	Common
1	50	10	40	110	140
2	50	11	39	121	179
3	50	12	38	133	217

Under the terms of the preferred stock, the liquidation preference of the preferred stock increases each year as its capital account increases. In year one, the preferred shareholder is treated as if it received \$10 and purchased an additional \$10 of preferred stock. As a consequence, the preferred shareholder is allocated \$11 in year two (10 percent of \$110 of preferred stock). If the corporation is liquidated at the end of year three, the corporation has total assets of \$350 and the preferred stock has a capital account (liquidation preference) of \$133. The common stock would thus receive the remainder of the assets, or \$217.

As the text notes, capital accounts would be adjusted to reflect corporate losses. Assume that the corporation is not liquidated until year four and there is a \$100 loss in year four, so the corporation's assets are reduced to \$250. In that case, no income would be allocated to either shareholder in year four, but the \$100 loss would reduce the common shareholder's capital account to \$117. Upon liquidation at the end of year four, the preferred shareholder would receive \$133 and the common shareholders would receive \$117.

25. The full integration proposal in Blueprints used an annual record date method and designated the shareholders on the first day of the taxable year as the shareholders of record to avoid "trafficking" in shares of loss corporations at year end. Blueprints, pp. 70-71, rejected a "last day" rule because, at year end, the market would have information indicating that the corporation would incur a tax loss for the year, and shares could then be sold to high-bracket taxpayers to whom the loss would be most useful. Because the shareholder allocation prototype does not permit the passthrough of losses to shareholders, loss trafficking is not an issue. The quarterly record date approach also minimizes tax-motivated year-end trading to capture credits for corporate taxes paid by limiting the benefit of year end ownership to one quarter of income and its proportional share of tax.

26. It may be desirable to allow (or require) corporations to close their books under certain circumstances. For example, a seller of a majority stock interest in a corporation may wish to ensure that income generated by activities after the sale will not be allocated to her. Similarly, the government could have an interest in requiring closing of the books after extraordinary corporate events to assure that net income and loss are allocated to the appropriate shareholders.

27. The effect of A's loss is to defer taxation of \$10.35 of corporate income until the purchaser sells his stock. If A can fully use the capital loss, A's loss offsets the tax on \$10.35 of corporate income. The purchaser, however, has a basis of \$144.85 (\$117.25 plus \$27.60) in the stock of a corporation having assets with a value of \$155.20. The purchaser thus has built-in gain of \$10.35 in his stock.

28. The Code provides that a partnership's taxable year closes with respect to a partner whose entire interest is sold. See IRC § 706(c). If a partner's interest varies during a year, the Code simply provides the general rule that tax items are to be allocated to take into account this variation. Specific rules are provided for a few items of cash basis taxpayers, such as interest and taxes, which must be allocated on a per day basis throughout the taxable year. See IRC § 706(d)(2).

29. In that case, each prior quarter's income would be unaffected by subsequent events, and each future quarter's income would be allocated to the purchaser.

30. We also rejected the alternative of allocating a corporation's income on a per share per day basis throughout the taxable year. Although current law employs this system for S corporations, which must allocate income among stockholders on a strict pro rata basis, including daily allocation of income where there has been an ownership change, we believe that this system could not successfully be applied to large corporations with publicly held stock in which there is frequent trading. Publicly traded partnerships are widely held, publicly traded entities that are required under current law to allocate certain items among partners on a per day approach. However, these partnerships typically adopt conventions to minimize the difficulties of tracking frequent changes in ownership, for example, by allocating each month's share of partnership income to the partner holding the partnership unit on the first day of the month. Compared to publicly traded partnerships, publicly held corporations have more shares of stock outstanding, and the stock is traded more frequently; for example, trading of the most actively traded stock can exceed one million share per day. A per share per day approach would require tracking of many millions of transfers during a year, and therefore a daily allocation method would be impractical for publicly traded corporations.

31. The Blueprints system is one example. That system did not include a corporate level tax, taxed capital gains at ordinary income rates, and permitted unlimited use of capital losses against ordinary income. See Blueprints, p. 77. Accordingly, the Blueprints system permitted a shareholder of record who sold stock during the year to calculate gain or loss calculated by reference to his basis at the beginning of the year, based on the observation that the allocation of current year income would not affect the difference between the sale proceeds and his basis as of the date of sale. The corporate income or loss that he would have to report as the shareholder of record would be exactly offset by a corresponding basis adjustment. See Blueprints, pp. 71-72.

The results are somewhat different under the shareholder allocation system, which retains a corporate level tax. The introduction of a corporate level tax means that allocations of taxable income increase share basis but do not create any additional shareholder level tax liability (because the corporate tax rate is at least equal to the maximum shareholder rate). For example, under the Blueprints system, an unexpected increase in allocable earnings of \$100 would increase a selling shareholder's taxable income by \$100 but would increase basis (and reduce gain, or increase loss, on sale) by the same amount. Ignoring differences in character (which may have significant consequences), the shareholder's total income would be the same. Under the shareholder allocation prototype, however, an unexpected \$100 increase in earnings would result in an allocation of \$100 of earnings and \$31 of tax credits. If this increase occurred for a period prior to the period in which the sale took place, e.g., an unexpected increase in earnings for the first quarter with respect to stock transferred in the second quarter, the withholding credit will be available to the selling shareholder. The parties to the transfer would need to estimate the potential for material changes in earnings on pricing the stock. Blueprints acknowledged that the addition of a corporate level tax complicates calculation of gain on sale. Blueprints, p. 74.

The current treatment of capital gains and losses would complicate calculations under a record date system. A shareholder who sold stock with a basis of \$100 for \$150 might not be indifferent between \$50 of capital gain (if gain were calculated at the time of sale) and \$75 of ordinary income and a \$25 capital loss (if calculation of gain were deferred and the corporation earned \$75 for the year).

32. Where corporate tax is imposed at a rate greater than or equal to the maximum individual rate, the government does not suffer from delay in attributing income to the proper corporate entity. An upper tier corporation that held stock in a lower tier corporation might be required to report its income from the lower tier corporation with a one year delay. Thus, if an

upper tier corporation purchased stock in another corporation during year one, the upper tier corporation would report no income from the investment in year one. The upper tier corporation's share of the lower tier corporation's year-one income would be reported in year two. The government's interest would not suffer, as the lower tier corporation's income would have been subject to tax at the corporate rate in year one. The upper tier corporation and its shareholders would, however, suffer a detriment to the extent that the corporate rate exceeds shareholder rates and shareholders would have been entitled to use excess credits for corporate taxes paid. In that case, the upper tier corporation's shareholders have, in effect, made an interest-free loan of the excess credits to the government.

Such a system could be restricted to situations where the upper and lower tier corporations have identical taxable years. If taxable years differ, the upper tier corporation would report the lower tier income in its taxable year in which the lower tier corporation's taxable year ends. If two corporations own stock in each other, this system could result in a continuous delay in proper attribution of the income. Under such a system, taxpayers would have an incentive to structure their investments to minimize relationships that cause detrimental reporting delays. To the extent such arrangements are impractical, however, a shareholder allocation system would treat intercorporate investments more harshly than direct investment.

33. The pending tax simplification bills would adopt a similar approach for large partnerships. See The Tax Simplification Act of 1991, H.R. 2777 and S. 1394, 102d Cong., 1st Sess. (June 26, 1991). See also U.S. Department of the Treasury, Widely Held Partnerships (1990).

34. This problem is closely analogous to the problem of extending preferences to shareholders, discussed in Section 3.E.

35. Example. A U.S. corporation's only income is a dividend from a foreign subsidiary. Under IRC § 902, the corporation includes \$100 in income and receives a credit for foreign taxes paid of \$40. Under the foreign tax credit limitation rules of IRC § 904, the corporation's foreign tax credit is limited to \$31. The corporation's sole shareholder is Shareholder A who has a marginal tax rate of 15 percent and wage income of \$100. Without foreign tax credit limitation rules at the shareholder level, Shareholder A will treat \$31 as a credit for taxes paid and use the excess credit of \$16 to offset all tax due on his wage income.

Section 11.D discusses the feasibility of using a shareholder level exclusion of foreign source income to avoid the application of IRC § 904 at the shareholder level if foreign taxes were treated like U.S. taxes under the imputation credit prototype.

Chapter 4

1. Although there are no existing models of this prototype, others have suggested a similar approach using a bondholder credit. See, e.g., Steuerle (1989) (describing a "simplified integrated tax" that would be withheld by corporations at the maximum individual or corporate rate); Seidman (1990) (describing an FDIC proposal to require corporations to withhold 34 percent of all their dividend and interest payments and require recipients to report the grossed-up amount of the distributions and claim a credit for the tax withheld by the corporation); H.R. 4457, 101st Cong., 2d Sess. (1990) (introduced by Congressman Vander Jagt, and proposing an approach similar to the FDIC proposal outlined by Mr. Seidman). For proposals that resemble CBIT even more closely, see Jacobs (1987) (describing a 28 percent "single business tax" on capital income that would be imposed by disallowing business interest deductions and excluding interest and dividends from investors' taxable income); Bravenec (1989) (describing a "nontraditional approach to integration" that would deny corporations interest deductions and exclude from income of investors dividends and interest received from corporations).

The financial accounting ramifications of CBIT are, in many respects, the most direct of all the integration prototypes. The nondeductibility of interest expense would increase corporations' income tax burden, thereby increasing the provision for income taxes and reducing earnings per share. Generally, we would expect an increase in the provision for income taxes and a reduction in earnings per share for net borrowers. In the rare case of certain net lenders, the provision for income taxes could be reduced and earnings per share could be increased. Because nondeductibility of interest expense would increase taxes currently payable, CBIT also would serve to increase the reported current liability for income taxes and the cash flow requirements associated with this current liability. The recommended gradual phase-in of CBIT should allow for gradual changes in capital structures and enhance the comparability of interperiod financial results.

A less obvious financial accounting effect of CBIT arises if a compensatory tax is imposed. The standards for accounting for income taxes generally require corporations to recognize as income tax expense both the taxes currently payable and the taxes that are payable during a future period but are, nonetheless, associated with earnings during the current period. See Accounting Principles Board, Opinion No. 11 (1967), paragraph 34, and Financial Accounting Standards Board, Statement

No. 96 (1987), paragraph 7. Under these standards, income tax expense recognized by a CBIT entity would include the potential compensatory tax liability that is associated with preference income which is earned and retained by the entity. Thus, the compensatory tax could serve to further increase the provision for income taxes. The financial accounting for a compensatory tax has never been formally considered, however, and it is conceivable that the financial accounting authorities might permit corporations to disregard potential tax expense associated with future compensatory taxes provided the corporation's earnings distribution policy suggests that the likelihood of a distribution of preference income is remote. The Accounting Principles Board has adopted such a position with respect to the provision for taxes that may arise with respect to distributed earnings of subsidiaries, e.g., foreign subsidiaries or subsidiaries that are not consolidated for tax purposes. See Accounting Principles Board, Opinion No. 23 (1972), paragraphs 9-14.

2. See Chapter 10.

3. CBIT is related to, but not identical with, a bondholder credit system that taxes interest income at the debtholder level through an imputation credit system. CBIT differs from a bondholder credit system where the borrower and lender have different marginal tax rates. See Section 11.H, which describes a bondholder credit system and discusses the differences between that system and CBIT.

4. See Section 13.H. If gains on sale of CBIT equity and debt are not subject to tax, losses on such securities also would not be allowed. Given the difficulty of the analysis of capital gains in the context of integration (see Chapter 8), we simply note here that the CBIT prototype would be revenue neutral at a 31 percent rate with full exclusion of capital gains and losses on sales of CBIT equity and debt at the investor level.

5. See Sections 4.F and 6.D.

6. Compare Sweden's flat rate tax on capital income, adopted in 1991 as part of a comprehensive tax reform package. See Swedish Ministry of Finance (1991) and Lodin (1990). Under the new system, a flat tax rate of 30 percent applies to all capital income received by individuals, including dividends, interest, and capital gains. Earned income is taxed separately, at graduated marginal rates ranging from approximately 31 to 50 percent. Unlike CBIT, Sweden's flat rate tax on capital is not an integration proposal. Sweden generally retains the classical system of corporate taxation, taxing corporate income at a rate of 30 percent. The Swedish system provides a limited dividends paid deduction for new equity and a "tax equalization reserve" that reduces the effective tax burden on retained earnings to approximately 23 percent. Swedish Ministry of Finance (1991), p. 39.

7. A gradual phase-in also would provide an opportunity to evaluate the extent to which imposing one level of tax on interest paid to tax-exempt and foreign investors might induce those investors to change the composition of their portfolios or the level of their investment in U.S. business. Adjustments in the application of CBIT to these investors can be adopted to reduce such effects if undesirable portfolio shifts or changes in capital flows occur. See Section 4.F. Partial steps toward a CBIT regime that would narrow distinctions between debt and equity also are possible on a revenue neutral basis. See Section 6.D.

8. As recommended, the CBIT prototype can use a 31 percent rate—equal to the top individual marginal rate—rather than a 34 percent rate without losing revenue relative to current law. See Section 13.H.

9. Carrybacks would not, however, be permitted if they would create a negative balance in the EDA.

10. Fully-taxed income is determined in the same manner as under the dividend exclusion prototype. See Sections 2.B and 4.D.

11. Several nations have expressed concern about their increasing inability to tax capital income, and some interest has been shown in the adoption of a withholding tax of 10 to 15 percent on capital income, although concern over the potentially adverse implications of the unilateral adoption of such a tax has precluded general acceptance of such a tax. In 1989, the European Commission (EC) proposed a 15 percent withholding tax on savings bank and bond interest income earned by residents of the EC. This proposal, which would not have affected Eurobonds or residents of countries outside the EC, was not accepted, although an informal meeting of the Finance Ministers of the member countries supported a withholding tax on capital income if such tax also were supported by the United States, Japan, and other countries. See Turro (1989). EC Tax Commissioner Madame Scrivener subsequently proposed a 10 percent tax on interest income, but this proposal also was not generally accepted; see Goldsworth (1990). Since then, Madame Scrivener has continued to express the view that a general withholding tax on interest income is the best solution to the problem of tax avoidance in a world of increased capital mobility. See Nagle (1990) and *Daily Tax Report* (November 8, 1991).

12. This Report explores CBIT as an integration prototype directed to the taxation of equity and debt income generated by businesses. The CBIT approach, however, might be extended to other types of interest income. Such an expansion of CBIT might provide a means of taxing all interest income at a uniform rate. Economic efficiency suggests that taxing capital income at a uniform rate might improve welfare. While an expanded CBIT approach is beyond the scope of this Report, we note that it raises difficult issues.

Home mortgage interest would be one important issue in considering an expanded CBIT regime. Under current law, home mortgage interest generally is deductible by the payor and includable in the income of the recipient. While the basic CBIT prototype retains the current law treatment, an expanded CBIT regime might subject home mortgage interest to CBIT. Subjecting home mortgage interest to the CBIT rules would ensure that one level of tax is collected on home mortgage interest. Under current law, home mortgage interest paid to tax-exempt or foreign investors (who may hold mortgage passthrough certificates) escapes the U.S. tax base entirely. Depending upon the level of interest rates following adoption of an expanded CBIT regime, the average homeowner with a mortgage might be better off with CBIT treatment than with the deductibility of current law.

In addition, if all capital income were taxed at a single rate at the payor level, the distinction between interest and other types of capital income that may have a significant interest component would become more important. "Identifying Disguised Interest" in Section 4.G discusses the implications of CBIT for the current law distinction between true leases that are treated as leases and financing leases that are treated as loans. That section reflects our judgment that, under the CBIT prototype, no important changes in current rules for distinguishing between interest and other types of capital income are necessary. In an expanded CBIT regime, however, the pressure on the line between interest and other capital income would be greater.

13. Interest and dividends received from a nonCBIT business would be included in the taxable incomes of individual and business investors, and capital gains realized on the disposition of interests in nonCBIT businesses would be taxable without regard to any change due to CBIT.

14. We anticipate that entities might move freely from CBIT to nonCBIT status based on annual gross receipts, i.e., a business which had gross receipts of \$75,000 in year 1, \$125,000 in year 2, and \$75,000 in year 3 would report its income under current law provisions in years 1 and 3 and file a CBIT return in year 2. CBIT tax paid in year 2 would allow payment of tax-free distributions attributable to the taxed amounts in year 3 and later nonCBIT years. The impact of year to year changes would cause some complexity and would cause a rate notch effect as an entity moves in and out of CBIT status. An alternative would allow organizations that generally meet the gross receipts test to remain nonCBIT entities until they have exceeded the floor for several years.

15. If the lower bound were higher, an aggregation rule probably would be required. The least complicated approach would require individuals with more than a threshold amount, e.g., \$100,000, on Schedules C and K of their Forms 1040 to pay tax at a schedular rate of 31 percent on the excess. While this approach would inhibit multiplication of entities to avoid the CBIT loss limitation, it would not be effective to prevent use of multiple entities to evade the CBIT interest deduction disallowance rule. A refinement could require all nonCBIT small entities to report to their shareholders and partners their deductions for business interest paid. (Individual proprietors would, of course, know this amount for Schedule C activities.) Individuals could then be required to add these amounts to the income reported on Schedules C and K in computing the schedular tax described above.

16. An alternative would adopt graduated CBIT rates to reduce the impact of CBIT on small businesses. Because the 31 percent CBIT rate equals the top individual rate, this would have the effect of imposing CBIT at rates identical to those at the individual level. The principal disadvantage of this approach is that it would require complex rules to combat multiple use of the graduated rates by common owners. Compare IRC § 1551 (denying the benefit of graduated rates to corporations under common control).

Another alternative that we rejected as unduly complex would subject all corporations and unincorporated businesses to CBIT, but tax all income of owner-managers at their personal rates rather than at the CBIT rate. Once owner-managers have been identified, the business would proceed to calculate its CBIT tax, excluding the share of profits and other income attributable to the owner-managers (whether that income is called salary, bonuses, partnership income, dividends, or interest) from the CBIT income of the business. The owner-managers then would include these amounts in their personal income when they calculate their taxes. This alternative, however, would introduce a set of complexities that a receipts-based exception avoids. One example would be the need to separate all interest income and expense items between their business and personal components. Some taxpayers will see this task as unnecessarily difficult, while others will see it as an opportunity for tax planning. For example, a proprietorship operated out of the proprietor's home should bear a (nondeductible) portion of the home mortgage interest expense. Additional rules would be needed to address these problems. Taxpayers would likely find the rules to be complex, arbitrary, and unfair.

The criteria for being considered an owner-manager might be similar to the requirements for "material participation" under the passive loss limitations of IRC § 469. Another possible set of criteria would treat as owner-managers all individuals who report net earnings from self-employment under IRC § 1402. (Net earnings from self-employment, as defined in IRC § 1402(a), would have to be modified for CBIT purposes by adding back all the capital income that is excluded from the current self-employment tax. See, e.g., IRC § 1402(a)(1) and (2), which exclude most rents, dividends, and interest from self-employment income.) A third possibility would follow the concept in IRC § 911(d)(2)(B), which identifies individuals who are engaged in trades or businesses in which both personal services and capital are material income-producing factors. That identification also was used to apply the maximum tax on earned income of former IRC § 1348, repealed in 1981, and the IRS and the courts developed a considerable body of law on whether services and capital are material income-producing factors in a given trade or business.

17. On the other hand, imposition of tax on distributed preference income (at either the corporate or shareholder level) may be viewed as retaining, in small part, the current system's bias against dividend distributions. See Chapter 5.

18. See Section 2.B. To illustrate the functioning of such a mechanism under CBIT, assume that a corporation earned \$100 of taxable income and \$100 of preference income. The corporation would pay tax of \$31 and would add \$69 of fully-taxed income to its EDA. The balance in the account would translate into \$69 of excludable distributable income. Thus, if the corporation distributed \$75 during the year, \$6 would be deemed made from preference income and would be includable in the investor's taxable income.

19. Other solutions may be possible. For example, a compensatory tax could be imposed, but a tax credit like that described in Section 4.F could be provided to tax-exempt and foreign investors. A compensatory tax would raise sufficient revenue to allow a refund of up to 50 percent of entity level taxes paid to tax-exempt and foreign investors. We expect that such a credit would significantly reduce the distortion in payout decisions the compensatory tax would create. As Section 11.B discusses, the compensatory tax creates a real increase in the tax burden on distributed preference income because we do not recommend refunding it to tax-exempt and foreign investors. If the compensatory tax were completely refundable to such investors, the amount of tax collected from investments by those investors would remain the same, and one would expect businesses and investors to adjust, in the long run, to what is merely a change in the collection mechanism without an additional burden. A partial refund of entity level tax would mitigate the distortions created by a compensatory tax. See also Section 6.D.

20. If a compensatory tax is adopted in CBIT, consideration could be given to allowing payments of compensatory tax to be credited against subsequent regular tax liability. Such a rule would allow the most taxpayer-favorable stacking of taxable income and preference income earned in different years. However, the existence of excess compensatory tax carryforwards—like excess ACT accounts in the U.K. system—may create "trafficking" concerns. See American Law Institute, Reporter's Memorandum No. 3 (1991).

Example. A corporation earns \$100 of preference income in year 1 and distributes \$69, incurring \$31 of compensatory tax. In year 2, the corporation earns \$100 of taxable income and owes \$31 of tax, which is offset by the previous year's payment of compensatory tax. The corporation now has a zero EDA and will owe \$31 of compensatory tax when it distributes the second year's income.

If compensatory tax is not creditable against regular tax liability, the corporation would owe \$31 of regular tax in year 2 but would have a \$31 EDA. This is the approach we generally follow in discussing a compensatory tax under CBIT.

21. The CBIT prototype uses the imputed interest and OID rules to distinguish payments of interest from payments of principal; similar rules may be required for preferred stock. See "Current Law Interest Deduction Limitations Under CBIT," in Section 4.G. These rules are necessary to ensure that payments representing a return of debt or preferred stock capital do not reduce the EDA and are not subject to compensatory tax or investor level tax.

The role, if any, of the current earnings and profits rules requires reconsideration under CBIT. Although earnings and profits could be computed under CBIT principles, i.e., without an interest deduction, it is unclear whether those rules would be necessary or appropriate as an additional (or alternative) mechanism for identifying payments that represent a return of equity or debt capital. The dividend exclusion prototype, which applies only to stock, retains the earnings and profits rules. See Section 2.F.

22. The tax paid would result in an addition to the EDA and would ensure that the income would not be taxed again when redistributed.

23. It may be desirable to provide a 100 percent deduction without regard to the degree of affiliation between the payor and the recipient. Although the dividend exclusion prototype retains current law, that prototype applies only to equity. Under CBIT, which applies to both debt and equity, there seems to be no reason to accord a larger deduction to a related creditor than to a portfolio creditor, and maintaining parity between debt and equity requires the same treatment for shareholders.

24. Imposing a 31 percent tax on all individual income in excess of \$100,000 reported on Schedules C and K of Form 1040 might be required to achieve these simplifications. See note 15 *supra*.

25. Historically, the corporate and individual minimum taxes were enacted in response to public perceptions that corporations and individuals with substantial economic income were not paying any income tax. Although CBIT may result in some taxpayers not writing checks to the IRS (because most of their income is excludable CBIT interest and dividends), individuals do not in fact escape tax on interest and dividends paid by a CBIT entity, because the investors' income tax is prepaid at the entity level and at the CBIT rate (which is equal to the top individual rate and exceeds the individual AMT rate).

26. Other countries with integrated systems of corporate taxation typically treat foreign source income in a similar fashion; the domestic tax on foreign source income that is not initially collected because of foreign tax credits (or an exemption rule) is collected, at the shareholder's tax rate, when the foreign source income is distributed to resident shareholders. Collection of this tax is not considered inconsistent with income tax treaty obligations to grant relief for foreign taxes. If a compensatory tax were imposed under CBIT, the domestic tax would be collected at the 31 percent CBIT rate, rather than the rate paid by the shareholder on its other income.

27. See *U.S. v. Goodyear Tire & Rubber Co.*, 493 U.S. 132 (1989).

28. Under this approach, the CBIT prototype collects U.S. tax currently on foreign source income of a branch used to pay interest. We view this as the correct approach. Unlike other differences typically found between the U.S. and foreign computations of the foreign source income base (e.g., depreciation or inventory), the treatment of interest under CBIT would be a major systemic difference. The decision not to permit a foreign tax credit against the portion of a branch's foreign source income base used to pay interest can be analogized to placing such income in a separate limitation or "basket" under IRC § 904(d). Since the foreign jurisdiction can be expected never to impose tax on this income, it is appropriate to prevent the averaging of high foreign taxes imposed on other foreign source income against the "zero" rate of tax imposed on the income used to pay interest.

We recommend that the foreign tax credit limitation be computed as the lesser of (1) .31 times foreign source income computed with a deduction for interest expense allowable under foreign law and (2) actual U.S. tax liability. This approach has a disadvantage in that dividend income received by a U.S. corporation from a foreign subsidiary will be included in the foreign source income base without a reduction for interest expense allocable to the corporation's investment in that subsidiary, i.e., because that interest expense will not be deductible for foreign tax purposes. The resulting inflation of the limitation will permit the U.S. corporation to absorb excess foreign tax credits generated by non-dividend income.

An alternative approach would compute the foreign tax credit limitation by taking into account the interest expense that would be deductible and allocable to foreign source income under current law rules. See IRC §§ 861 and 864. Under this approach, the foreign tax credit limitation formula would be: $.31 \times (\text{worldwide income}) \times (\text{foreign source income} / \text{worldwide income})$, where worldwide income is reduced by interest expense that would be deductible under current law and foreign source income is reduced by interest expense that would be allocable to such income under current law. An obvious disadvantage of this approach is that it would require the retention of current law provisions that determine the deductibility and allocation of interest expense. On balance, the choice between these alternatives depends upon whether the complexities associated with retention of current law interest rules are more or less acceptable than the potential averaging that would arise from reliance on foreign law. See also Section 4.G.

29. Computation of the earnings of a foreign subsidiary without a deduction for interest might be considered appropriate on the ground that such earnings are calculated under IRC § 902 in order to determine the U.S. tax liability of the U.S. corporate shareholder (a CBIT entity), and not of the foreign subsidiary. In other words IRC § 902 deems the U.S. corporate shareholder to have earned the earnings used to pay the dividends it receives from the foreign subsidiary and to have paid the associated foreign tax. If this approach were adopted, an indirect credit could be granted for interest payments received by a 10 percent U.S. corporate shareholder from a foreign subsidiary. Compare IRC § 904(d)(3)(C). A U.S. corporate shareholder receiving both interest and dividends from a foreign subsidiary with no other creditor would then receive a full indirect credit for foreign taxes paid by the subsidiary. This would permit the use of foreign tax credits to shelter the interest income from U.S. tax, however, which, as discussed in the context of foreign branch income, we consider objectionable. Moreover, in cases where a foreign subsidiary paid interest to a creditor other than a 10 percent U.S. corporate shareholder, this approach would result in the stranding of foreign tax credits at the subsidiary level. Specifically, the computation of

foreign subsidiary earnings without an interest deduction would reduce the indirect credit available to a U.S. corporate shareholder with respect to dividends received from the subsidiary, i.e., because those dividends would represent a reduced proportion of a larger, hypothetical amount of subsidiary earnings. It would be impossible for the U.S. shareholder to obtain a credit for the full amount of taxes paid with respect to income distributed as dividends because a portion of such taxes would be deemed to have been paid on income paid out as interest to a third party creditor. This would be the case, even though the foreign subsidiary was not actually taxed on income paid out as interest, by virtue of the availability of an interest deduction for foreign tax purposes. To avoid this result, we have proposed that the earnings of a foreign subsidiary be calculated for IRC § 902 purposes with an interest deduction based on the interest expense claimed under foreign law.

30. In the case of foreign operations conducted through a foreign partnership, this may raise an issue of comparability with a foreign branch. This issue is discussed below at note 37.

31. Introduction of CBIT might induce some U.S. corporations to reorganize foreign branch operations as foreign subsidiaries. The nondeductibility of interest under U.S., but not foreign, tax law would effectively reduce the foreign taxes available to offset U.S. tax, thus providing greater incentives for operating in corporate form abroad in order to defer U.S. taxation.

32. The branch profits tax also would be repealed because, in the absence of a dividend withholding tax, it would no longer be needed to maintain parity between U.S. branches and U.S. subsidiaries of foreign corporations.

33. Significant exceptions to the portfolio interest exemption, i.e., interest paid to a foreign bank on a loan made in the ordinary course of business and interest paid to related foreign persons, give the United States some leverage to obtain withholding rate reductions in treaties negotiated under current law.

34. See IRC § 882(c) and Treas. Reg. § 1.882-5.

35. Note that the 30 percent withholding rate would perform a function here analogous to the 31 percent schedular tax discussed in note 15. Reduction or elimination of the 30 percent tax by treaty might encourage the use of multiple small business entities to avoid CBIT.

36. The term "nonCBIT debt" refers to debt issued by entities that are not subject to CBIT. NonCBIT debt includes Treasury securities, home mortgages (and mortgage passthrough certificates), debt issued by tax-exempt entities, and debt issued by foreign governments and businesses, all taxable to U.S. persons. State and local government debt is nonCBIT debt also; however, it would remain tax exempt to the extent provided in current law.

37. U.S. CBIT entities needing funds for foreign operations could borrow through foreign subsidiaries. Borrowing through a foreign branch would not be desirable, however. Because a foreign branch would be a component of a CBIT entity, it would not be permitted to deduct interest expense. Thus, the branch would probably find it advantageous to borrow in the United States (where its ability to pay excludable interest could be expected to produce a lower interest rate) rather than paying higher, nonCBIT interest rates that would be required to attract foreign lenders. An alternative would treat foreign branches as if they were foreign subsidiaries for CBIT purposes. Interest paid by a foreign branch would then be deductible by the branch and taxable to the lender. Rules similar to those of IRC § 861(a)(1)(B)(i) (providing foreign sourcing for interest paid by foreign branches of U.S. banks on bank deposits) could be applied to avoid the imposition of any applicable CBIT on such interest paid to a foreign lender. This approach would raise numerous technical and compliance issues. For similar reasons, borrowing through a foreign subsidiary would not be advantageous if borrowed funds were to be used in the United States.

38. Alternatively, the credit could be fully refundable, without regard to the taxpayer's other tax liability. Making the credit nonrefundable is, however, consistent with the decision in Chapters 3 and 11 not to permit refunds of excess imputation credits to low-bracket shareholders and with the treatment of tax-exempt and foreign investors described in the text below. Although interest and dividend income would not be taxable under CBIT, most low-bracket individuals who would invest in CBIT entities should have sufficient tax liability on wages and nonCBIT income to use the CBIT investor credit.

39. See also American Law Institute, Reporter's Memorandum No. 3 (1991).

40. See Chapter 6. Under a distribution-related integration system that denies refunds of imputation credits on corporate dividends, tax-exempt investors would have an incentive to invest in debt rather than equity. By imposing a tax on investment income, the taxation of debt and equity would be conformed, and tax-exempt entities would have an incentive to invest in dividend-paying stock to use the excess imputation credits against the tax due on other income. This structure would

- encourage tax-exempt entities to hold a mixture of debt and equity, since the excess credits associated with corporate dividends could be used to offset the tax due on other kinds of investment income.
41. In theory, the policies which led Congress to enact IRC § 263A(f) would justify its retention for small business entities; however, given the capitalization threshold for application of IRC § 263A(f)(1)(B) (assets costing more than \$1 million or having long life or production period), retention of its complexity may not be justified for the few situations in which it would apply. In contrast, absent special rules to equate self-constructed and purchased assets, capitalization of interest for CBIT entities could undercut the CBIT revenue base by converting some nondeductible interest into basis eligible for cost recovery.
42. The rules of IRC § 265 would, however, be expanded to limit the deduction of expenses attributable to CBIT interest and dividend income. See Section 4.I.
43. A similar expansion of IRC § 265(a)(4) to cover regulated investment companies and other conduits which hold stock and debt of CBIT entities also will be required. See Section 4.H.
44. If A's lender were taxable, the disallowance of interest deductions to A would result in the collection of a double tax. However, the potential for tax arbitrage described in the text led us to adopt the disallowance solution.
45. As discussed in Section 4.E, the prototype computes the foreign tax credit limitation by calculating a branch's foreign source income taking into account the interest deduction allowed to the branch under foreign law. The alternative is to require allocation and apportionment of interest expense to the foreign source income as under current law. In that case, the provisions listed in the text would continue to be relevant for purposes of determining the foreign tax credit limitation.
46. For example, if the seller enjoys a reduced rate on capital gains, compared to a zero rate on CBIT interest, this tension will be reduced, but not eliminated. See also Chapter 8.
47. The Service's guidelines for ruling that a lessor is the owner of assets for tax purposes (and hence that the lessee's payments are rents) include rules governing (1) the length of the lease compared to the useful life of the property, (2) the residual value of the property at the end of the lease, (3) options to purchase or sell property at the end of the lease term, and (4) the lessor's equity investment in the property. See Rev. Proc. 75-21, 1975-1 C.B. 715. See also Rev. Proc. 75-28, 1975-1 C.B. 752, Rev. Proc. 76-30, 1976-2 C.B. 647, and Rev. Proc. 79-48, 1979-2 C.B. 529.
- In theory, every leasing transaction has an interest component, because the lessee obtains current performance (the possession of the property) but makes deferred payments. In that sense, a lease is economically similar to an installment sale of the property. Compare Halperin (1986) (several different types of accelerated or deferred payments contain implicit loans); Mundstock (1991) (economic equivalence of loans and leases). The degree of similarity between the two, however, depends on several factors, including the term of the lease agreement and the rights retained by the lessor with respect to the property. The tax law historically has respected a broad range of leases, and we do not think it necessary to change that treatment in the move to CBIT, although it would be possible to consider CBIT treatment for certain rents and royalties.
48. That the courts' efforts in this area have led to inconsistent results is hardly surprising given the factual nature of each inquiry into who is the true owner of property that is the subject of complex contractual arrangements between parties. No case shows this inconsistency better than the Supreme Court's only examination of this area in the last 50 years, *Frank Lyon v. United States*, 435 U.S. 561 (1978), rev'g 536 F.2d 746 (8th Cir. 1976), rev'g 75-2 USTC ¶ 9545 (E.D. Ark. 1975). Based on all of the facts and circumstances, the trial court upheld the taxpayer's contention that it was the true owner of the building. The Court of Appeals, however, analogizing the rights of a property owner to a bundle of sticks, agreed with the government's argument that taxpayer "totes an empty bundle and that the term 'owner' for tax purposes cannot reasonably be attached to the empty wrapping taxpayer has retained." 536 F.2d at 751. The Supreme Court then undertook its own evaluation of the facts, and cited some two dozen facts to support its conclusion that the taxpayer was the tax owner of the building. Statutory standards might help the courts to reach more consistent results.
49. See IRC §§ 483, 1274. IRC § 7872 also should be retained in order to characterize properly the interest component of certain below-market loans.
50. It may be possible to simplify the current OID rules for CBIT debt, because neither the issuer nor the lender must currently accrue deductions or income. Thus, it may be sufficient to adopt rules that correctly identify the character of payments. Compare IRC § 483. Similar rules may be needed to distinguish dividend payments from redemption payments on preferred stock. See § 305(c). The treatment of capital gains under CBIT may, however, result in some retention of the current timing rules. If capital gains on CBIT debt are taxed, it may be appropriate to provide debtholders with an increase

in basis (with a corresponding debit to the issuer's EDA) to ensure that accrued discount on CBIT debt is not taxed as capital gains when the debt is sold. See Section 9.B.

51. Consideration might be given to providing Treasury with the option of issuing both taxable debt and tax-exempt debt.

52. See IRC § 103.

53. The exemption also may permit distributions to be taxed at a lower rate, if the beneficiary is in a lower tax bracket after retirement.

54. "CBIT income" refers to dividends and interest on CBIT debt and equity (and, if capital gains on CBIT debt and equity are exempt from tax under CBIT, capital gains on such assets). The two accounts would increase when the pension fund receives contributions, nonCBIT income, or CBIT income, and would decrease when the pension fund makes distributions to beneficiaries. If CBIT income were reinvested in nonCBIT assets, only the return on those assets would be added to the nonCBIT income account. If no compensatory tax is adopted, CBIT income would include only excludable CBIT interest and dividends.

Pension funds would, as under current law, also track nondeductible employee contributions, which are exempt from tax when distributed.

The transition to the new regime should be straightforward. Pension funds would calculate the sum of all previous contributions and investment earnings on the date of enactment of CBIT. Those earnings would go into the nonCBIT account, and any future CBIT earnings would go into the CBIT account.

55. Special rules may be needed to limit the allocation of EDA balances to preferred stock upon liquidation. For example, it may be inappropriate to allocate any EDA to preferred stock on which current, fully excludable dividends have been paid. In that case, the liquidation proceeds simply represent a return of capital.

56. IRC § 732 prevents a step-up in basis, however, thereby preserving a potential tax whenever the distributee partner disposes of the distributed asset.

57. Such exceptions might be patterned on existing IRC §§ 731-732 or prior IRC § 333, which was repealed in 1986.

58. See Treas. Reg. § 301.7701-2. In general, an organization that has associates and an objective to carry on business for joint profit is classified as a corporation rather than a partnership if it has more corporate characteristics than noncorporate characteristics. The corporate characteristics relevant to this determination are (1) continuity of life, (2) centralization of management, (3) limited liability for debts, and (4) free transferability of interests.

59. IRC § 7704.

60. IRC § 851 et seq. A RIC also may retain and pay tax on long-term capital gains, in which case shareholders must include such gains in their income and are credited with their share of corporate tax paid.

61. IRC § 856 et seq. REITs are allowed a dividends-paid deduction for distributions of both ordinary income and capital gains income, but are not allowed to impute retained capital gain income to shareholders.

62. IRC § 860A et seq.

63. See IRC § 1381 et seq. which generally apply to cooperatives. See also IRC § 501(c)(12) (certain cooperative telephone or electric companies); and IRC § 521 (farmers' cooperatives).

64. These changes also would apply to sole proprietorships not eligible for the small business exception.

65. IRC § 265(a)(4) should be expanded to cover CBIT investments of all three conduit entities. As discussed in the context of rules for savings and loan associations under CBIT, policymakers could consider imposing a withholding tax of 31 percent on distributions from RICs, REITs, and particularly REMICs to tax-exempt investors attributable to home mortgage interest to prevent unfair competition between these entities and savings and loan associations.

66. The patronage dividend mechanism is sufficiently flexible that it should permit the cooperative to shift income attributable

to the disallowance of interest deductions to patrons. In effect, the cooperative could substitute a patronage deduction for the interest deduction if patrons are generally in a tax bracket under 31 percent.

67. For example, consideration might be given to allowing banks to pay deductible (and includable) interest on a limited class of deposits. The possibility of such an option for savings and loan associations is discussed in the text below.

68. Unlike the alternative approach, this rule would require a provision defining the institutions eligible for its special rule; e.g., the special rule could apply to CBIT entities that earn at least 80 percent of their total income from interest and dividends.

69. The potential problems could be exacerbated if losses arising from nonapplication of IRC § 265(a) to financial institution operating expenses were allowed to generate net operating losses that could be used by other members of a consolidated group.

70. S&Ls may well argue that such a provision is necessary to preserve parity with REMICs and other entities which we recommend retain their conduit status. Since REMICs, for example, could market mortgage pass through instruments to tax-exempt institutions without imposition of an entity level tax of 31 percent, REMICs would clearly have an advantage in raising funds from the tax-exempt sector over S&Ls. As suggested earlier, an alternative solution to this result might be to impose a 31 percent withholding tax on REMIC distributions to tax-exempt organizations or impose such a tax directly on tax-exempt organizations receiving tax-exempt interest through a REMIC by treating such income as unrelated business taxable income. Under current law, interest paid on REMIC regular interests is tax free to tax-exempt investors and, in general, to foreign investors. A portion of the income on REMIC residual interests is subject to UBIT in the hands of tax-exempt organizations and is subject to 30 percent withholding tax when distributions are made to foreigners.

71. Under current law, insurance companies generally include in gross income premiums and investment income and deduct from gross income general business expenses and distributions to policyholders and beneficiaries. In addition, the companies are allowed to deduct the net increase in the amount of insurance reserves during the taxable year. If reserves decrease, the amount of the decrease is included in income. Over the life of any insurance policy, the net deduction for reserves is always zero (since the reduction in reserves as claims or benefits are paid generates items of income that offset the earlier deductions). Thus, the reserve deduction affects the timing of insurance company deductions for claims and benefits, but does not increase the ultimate deductions to more than the amount of claims and benefits actually paid.

Tax reserves are calculated on a discounted basis to reflect the time value of money. The deduction for the net increase in insurance reserves serves two purposes. First, it prevents that portion of premiums needed to fund future casualty or benefit payments from being taxed. Second, it provides for a deduction equal to the expected investment return on reserve funds. As a result of the combined deduction for reserves, claims and benefits, insurance companies are able to deduct currently the present value of anticipated future payments, instead of deducting those payments when made. The difference between the present value of future payments and nominal amount of those payments decreases over time, and each year a deduction is allowed to the extent of the decrease during the taxable year.

Insurance companies also make dividend payments to policyholders. Policyholder dividends consist of various components, one of which is an interest component. Dividends paid to policyholders are generally deductible from income and, among other things, provide a mechanism for life insurance companies to adjust effectively the amount of the reserve deduction for changes in the rate of investment return. Thus, the interest-like deduction available to insurance companies under current law is spread among deductions for the change in reserves, for claims and benefits paid, and for policyholder dividends paid. For a more complete discussion of the issues related to insurance company policyholder dividends, see U.S. Department of the Treasury, Report to the Congress on Life Insurance Company Taxation (1989) and U.S. Department of the Treasury, Report to Congress on Property and Casualty Insurance Taxation (1991).

72. CBIT would not alter current law rules which result in exclusion of much of the amount paid to policyholders in the form of claims, benefits, or policy dividends. Under current law, virtually all death benefit distributions payable under life insurance policies are fully excluded from gross income. Casualty claim payments are typically offset by loss (IRC § 165) or rollover (IRC § 1033) deductions allowed to the recipient. However, some other insurance company distributions are included in income. Business policyholders of casualty policies must generally include policyholder dividends in income, because they generally may deduct the related premiums. Individuals receiving policyholder dividends from either P&C or life policies or receiving policy surrender distributions from life policies generally are required to take those distributions into income only to the extent that they exceed the total of previous premium payments less previous distributions. As a result of these rules, very little of the investment income earned on cash value is included in taxable income at the individual level under current law.

PART III

Introduction

1. Under these conditions, any system of integration would result in the imposition of a single level of tax at a single tax rate, regardless of whether corporate earnings were distributed or retained. For example, assume that a corporation earns \$100, and all corporate and individual income is taxed at a flat rate of 34 percent. Under the shareholder allocation prototype, \$100 of income would be imputed to the shareholder, who would pay \$34 in tax. The tax due also would be \$34 under any of the three distribution-related integration systems. In each system, the corporation would pay \$34 of tax. Under the dividend exclusion prototype the corporation could distribute its \$66 of after-tax earnings tax-free to shareholders. Under the imputation credit system discussed in Chapter 11, when earnings were distributed, the shareholder would have a \$34 credit, which would exactly offset his tax liability. In a dividend deduction system, the corporation would have a \$100 deduction that would offset its tax liability in the year of distribution, and the shareholder would pay tax of \$34. Under CBIT, the earnings would be subject to \$34 of tax at the corporate level but would not be taxable upon distribution as interest or dividends to investors.

2. The equivalency analysis set forth in the preceding note does not take into account the possible additional burden created by taxing capital gains on corporate stock. See Chapter 8. Appendix C discusses the equivalence of distribution-related integration systems.

Chapter 5

1. Although no agreement exists on the precise specification of the standard accounting rules, there is sufficient conformity that most analysts are able to ascribe to an accepted list of preferential items. See, e.g., Budget of the United States Government, Fiscal Year 1992, Ch. XI, "Tax Expenditures."

2. See IRC § 312. Because corporate shareholders generally claim a dividends received deduction for both regular tax (IRC § 243) and minimum tax (IRC § 56(g)(4)(c)(ii)) purposes, preference income flows through to most corporate shareholders under current law.

3. See McLure (1979), pp. 131-32, and Polito (1989), pp. 1036-37 (both arguing that corporate preferences should be passed through to shareholders under a fully integrated tax system); and Kitchen (1987), p. 360 (defending the ability to pass preferences through under Canada's integrated tax system).

4. Congress has at times indicated a willingness to discriminate between corporate and noncorporate preferences. For example, IRC § 291 restricts the availability to corporations of certain preferences that are otherwise available to both corporate and noncorporate entities alike. See also IRC § 56(b), which specifies several AMT adjustments that apply only to taxpayers other than corporations, and IRC § 56(c) and (g), which specify adjustments that apply only to corporations.

5. See, e.g., the tax expenditure estimates presented in the Budget of the U.S. Government, cited in note 1. Although the approximately \$50 billion annual corporate tax expenditures noted in the 1992 Budget overstates the magnitude of revenue cost (primarily because behavioral adjustments are not considered in the tax expenditure estimates) this figure serves to illustrate the significant revenue impact that would result from extending preferences to shareholders.

6. As discussed in Chapter 13, a complete analysis of the economic effects of the integration prototypes should include an examination of the efficiency cost of the revenue offsets.

7. See Avi-Yonah (1990), pp. 199-202.

8. See Section 2.B. The same is true of an imputation credit system of distribution-related integration. Under such a system, extending preferences to shareholders can result in shareholders receiving tax credits that exceed the corporate level taxes paid. This occurs if the integration rules implicitly (and incorrectly) assume that the corporation has paid taxes on preference-related income, and if the corporation tax rate exceeds the individual tax rate. For example, such errors would occur if a shareholder imputation credit method required that a shareholder compute his credit as a fixed percentage of dividends received (if the percentage is based on the statutory rate of tax), gross up the dividend by the amount of the credit, apply his tax rate to the grossed-up dividend, and apply the credit to the resulting tax liability. This procedure would extend preferences to shareholders whenever the corporate and personal tax rates are equal, but it would provide greater subsidy for preferences if the corporate tax rate exceeds the shareholder tax rate.

9. If it were desired to extend some (but not all) preferences to shareholders, a distribution-related integration system could be structured to accomplish this result. Preferences in the form of tax credits could be passed through simply by treating such credits the same as taxes actually paid. The relative ease of passing such credits through in an integrated system should encourage policymakers so to structure any tax preferences that it desired to pass through to shareholders. Exemption preferences also could be passed through, but, in an imputation credit system, that would require additional accounts at the corporate level and separate treatment at the shareholder level. Deferral preferences create the most substantial mechanical problems if passed through to shareholders. See also Section 3.E.

10. A compensatory tax ensures that full corporate level tax has been paid on distributed income by assessing a "toll charge" on the corporation with respect to each distribution of preference income. Section 11.B and Appendix C examine different types of compensatory tax systems. To determine the amount of the toll charge, corporations would maintain an account of corporate tax paid or of fully-taxed income to determine the amounts of fully-taxed and of preference income. A "stacking" rule could then be applied to determine the extent to which distributed earnings were made from the corporation's fully-taxed or preference income. The stacking rule most favorable to taxpayers is to treat corporate distributions as paid first from fully-taxed income and then from preference income. Thus, if the corporation has sufficient fully-taxed income to apply to distributions, the corporation and its shareholders will suffer no adverse consequences from a decision not to extend preferences to shareholders. Chapter 11 contains a discussion of stacking alternatives and their economic effects. The principal alternative is a pro rata stacking rule, which would treat distributions as containing a proportionate share of the corporation's retained preference income.

If the compensatory tax rate is set equal to the corporate tax rate, the effect is to recapture corporate tax preferences. In that case, if a corporation distributes only fully-taxed income (determined under stacking rules), no additional tax liability results. For distributions in excess of fully-taxed income, each dollar of tax-exempt preference income is subject to the full corporate tax rate, and the full amount of tax paid is available as a shareholder credit. If the shareholder credit is fully refundable, the tax system collects no additional net taxes from a compensatory tax. If the credit is not fully refundable, then the tax system collects an additional tax on preferences distributed to shareholders who have insufficient tax liability to absorb the credit or who are tax-exempt.

If the compensatory tax is set at a rate below the corporate tax rate, distributions in excess of fully-taxed income result in additional corporate level tax liability on preference income, but at less than a dollar-for-dollar rate. This achieves a result somewhat analogous to the current alternative minimum tax, because distributed preference income bears tax at a rate lower than the corporate tax rate. Setting the compensatory tax at a rate lower than the corporate tax rate differs from an alternative minimum tax: the compensatory tax is triggered only on distributions, while the current alternative minimum tax applies regardless of whether funds are retained or distributed.

A third alternative sets the compensatory tax rate equal to the shareholder rate rather than the corporate rate. This approach, adopted in the U.K. imputation system, effectively taxes the corporation at the shareholder rate on distributed preference income and allows shareholders a credit at the same rate. For shareholders who pay tax at that shareholder rate, the compensatory tax acts as a withholding tax on funds distributed to shareholders. If the shareholder credit is not refundable and cannot be carried forward, the compensatory tax creates an additional tax burden on distributed preference income for shareholders whose tax rate is less than the statutory rate. Only refundability of tax credits will eliminate such consequences for tax-exempt shareholders.

Section 11.B examines the treatment of preference income distributed to tax-exempt shareholders under both a compensatory tax and a credit limitation approach.

11. See Section 11.B for a discussion of the different methods for limiting the shareholder credit to corporate level tax actually paid. This method requires the corporation to maintain an account of corporate taxes paid. In a dividend exclusion system, the amount of taxes paid is converted into a corresponding amount of fully-taxed income. The account would be increased by corporate tax paid and the amount of credits from dividends received from other corporations and decreased by the amount of credits attached to distributions made to shareholders (or the fully-taxed income equivalents). As with the compensatory tax, a stacking rule is necessary to determine the extent to which distributions are made out of fully-taxed income. Shareholder credits with respect to distributions would thus be allowed only to the extent the corporation's account was sufficient to fund the credits. Distributions considered made out of preference income would not carry imputation credits and, thus, would be subject to tax at the shareholder tax rate, as under present law.

12. See Section 11.B.

13. See Section 2.B. If integration were extended to retained earnings through a dividend reinvestment mechanism, a decision not to extend corporate level tax preferences to shareholders could readily be implemented by restricting the dividend

reinvestment option to fully-taxed retained earnings. This could be accomplished by limiting the dividend reinvestment option to the balance in the corporation's EDA, in the dividend exclusion and CBIT prototypes, or the SCA, in the imputation credit prototype. See Chapter 9.

14. See Section 4.D.

15. See Section 3.E.

Chapter 6

1. In some cases, the Code also permits deductibility of donors' contributions as charitable contributions (IRC § 170), while contributions to pension funds are generally deductible as business expenses (IRC § 404).

2. This is true only when individuals' tax rates are constant over their working life and in retirement. If tax rates during retirement are lower, current law treatment of pension savings is even more valuable.

3. Income from an exempt organization's investments in a publicly traded partnership is subject to UBIT, regardless of whether the partnership's business is unrelated to the entity's exempt purpose.

4. As Chapter 5 notes, most preference items confer tax deferral rather than complete exemption. Corporate income sheltered from tax by a deferral preference can be distributed to a tax-exempt shareholder without shareholder level tax, preserving the value of tax deferral until the preference "turns around" and additional tax is imposed at the corporate level. Corporate preference income distributed as interest to tax-exempt debtholders receives even more favorable treatment: not only is the income exempt from tax at both the corporate and shareholder level, but the interest deduction may be available to offset otherwise taxable income. This benefit is not available for all preference income. IRC § 265, for example, disallows deductions for interest and other expenses attributable to tax-exempt bond interest.

5. In 1989, tax-exempt entities were allocated \$1.6 billion in income from partnerships, or approximately 2 percent of the total amount allocable to all partners. Of the tax-exempts' share, an estimated \$260 million was trade or business income that could have been subject to UBIT. The remainder consisted of rents, royalties, interest, dividends, and other forms of income not subject to UBIT.

6. Depending on the integration system adopted, there could still be an advantage in distributing corporate preference income to tax-exempt shareholders. For example, under a shareholder credit limitation system, preference income would be exempt from tax at the corporate level and would be exempt from tax at the investor level if distributed to a tax-exempt shareholder. Retained preference income, realized in the form of capital gains on stock, also would be exempt from tax in the hands of a tax-exempt shareholder. A compensatory tax, discussed in Section 11.B, would impose a corporate level tax on distributed preference income, but would not change the treatment of retained preference income.

7. A dividend exclusion system would not provide equivalent treatment of debt and equity held by tax-exempt investors unless interest also were nondeductible at the corporate level and excludable by the recipient. This regime is CBIT; see Chapter 4.

8. See Sections 11.E and 12.A, respectively. A dividend deduction system without withholding would equalize the treatment of debt and equity investments by tax-exempt investors. Corporations would be able to deduct dividends paid, as they now deduct interest, and neither type of income would be taxable to the tax-exempt investor. This result could be changed by denying the deduction (or the benefit of the zero rate) for dividends paid to such tax-exempt shareholders, but such an approach would require corporations to track the identities and tax status of shareholders. Coupling a nonrefundable "withholding" tax with a dividend deduction could achieve results similar to a nonrefundable credit under an imputation credit method of integration.

9. The United Kingdom refunds the imputation credit to tax-exempt investors. However, while the U.K.'s imputation credit is fully refundable to all domestic shareholders, including tax-exempt shareholders, the U.K. has a partial distribution-related integration system, so earnings distributed to a tax-exempt shareholder still bear a tax equal to the excess of the corporate rate over the credit rate. See Appendix B. Tax-exempt organizations own approximately 40 percent of the outstanding stock of U.K. companies.

10. An effort to provide tax-free treatment for corporate income allocated to tax-exempt or tax-favored investors under CBIT would raise major problems. For income distributed in the form of interest and dividends, the relative advantage of such investors could be maintained by providing refunds of corporate tax paid with respect to funds distributed. For undistributed

income, however, eliminating the corporate level tax would require allocating undistributed income to the shareholders—exactly the type of administrative complexity that occurs under a shareholder allocation system and that the CBIT approach to integration seeks to avoid.

11. A dividend deduction proposal passed by the House of Representatives in 1985 would have made a portion of dividends received by certain tax-exempt organizations subject to UBIT. See H.R. 3838, 99th Cong., 1st Session, § 311 (1985) and H. Rept. No. 426, 99th Cong., 1st Sess. (1985), p.240.

12. For example, under an imputation credit system of distribution-related integration, providing full shareholder imputation credits on dividend income to tax-exempt investors would allow them to invest in a mix of equity and debt so the credits could be used to offset the tax on other investment income. This approach is similar to Australia's system for tax-exempt investors, adopted shortly after enactment of a shareholder credit limitation integration system. Allowing the credit to offset other investment income also discourages streaming of franked dividends to taxable investors and unfranked dividends to tax-exempt investors.

For example, assume a tax-exempt entity earns \$100, of which \$25 is dividend income and \$75 is interest income. Assume, in addition, that the dividend carries an imputation credit for corporate tax paid at a 31 percent rate and that the tax-exempt entity is subject to tax on all investment income at a 12 percent rate. The net dividend of \$25 would be treated as a gross dividend of \$36.23, with a tax credit of \$11.23. The tax-exempt entity would have a tax liability (before credits) of \$13.35 ($.12 \times 111.23$), which would be offset in part by the \$11.23 credit. The net tax due would be \$2.12.

13. If credits are nonrefundable, the revenue neutral rates are as follows: 8.4 percent for shareholder allocation, 7.6 percent for the imputation credit prototype, 7.2 percent for CBIT with no taxation of capital gains, and 6.1 percent for CBIT with current law capital gains taxation.

Chapter 7

1. Unlike many other countries, the United States also taxes the worldwide income of all U.S. citizens and U.S. corporations, whether or not they are residents of the United States.

2. Some or all of the U.S. shareholders of a foreign corporation may, however, be subject to current U.S. tax on all or a portion of the corporation's income if it earns income which is either passive, e.g., interest, dividends, royalties, and similar income or particularly mobile or holds assets that produce such income. See, e.g., IRC §§ 951, 1293.

3. Thus, for example, if a foreign subsidiary of a U.S. company earns \$100 abroad, pays \$40 in foreign corporate level taxes, and remits \$27 in dividends to its U.S. parent (\$30, net of a \$3 withholding tax imposed by the foreign country), the parent must report \$50 in foreign source dividend income (\$27 plus \$3 plus 50 percent of \$40), and can claim a credit (subject to the appropriate limitations) for direct foreign taxes of \$3 and indirect foreign taxes of \$20.

4. Merely acquiring U.S. stock and debt securities does not constitute a U.S. trade or business.

5. See, e.g., Bergsten, Horst, and Moran (1978) and Caves (1983). In the public economics literature, studies by Musgrave (1969), Horst (1980), and Giovannini (1989) have attempted to compare the relative efficiency of capital export and capital import neutrality under various stylized assumptions. See also the overview in JCS-6-91 (1991).

6. See "Savings and Investment" in Section 1.B.

7. Setting tax rates independently implies that countries take policies of their trading partners as given, and misestimate effects of their own policies. See, e.g., Gordon (1983). In particular, analyses of capital export neutrality often assume that foreign countries' tax rates are independent of the resident country's tax rates. The source country may, of course, take into account that most investment from abroad originates from countries that grant a worldwide credit for foreign taxes paid. The source country may, therefore, be able to increase taxes on foreign investment without reducing capital inflows because foreign governments, not investors, would absorb the tax. In effect, a policy of capital export neutrality may lead to a transfer from the resident country's treasury to that of the source country.

8. The foreign tax credit tends to promote capital export neutrality, because it eliminates an investor's U.S. tax liability to the extent of foreign taxes paid, but requires the investor to pay a residual U.S. tax if the U.S. tax rate is higher than the foreign tax rate. In this situation, the investor is neutral between domestic and foreign investment, because the investor bears

- the same tax burden in either case. For additional discussion, see Hines and Hubbard (1990) and JCS-6-91 (1991). As explained in the text, however, the foreign tax credit does not always have this effect.
9. The indirect credit thus provides equal treatment for foreign direct investment by U.S. corporations, whether through a foreign subsidiary or a foreign branch operation.
 10. This conclusion turns on accepting, as we do in Chapter 13, the traditional view of dividends. See Section 13.B. For additional discussion of these issues, see Hines and Hubbard (1990) and the studies cited therein.
 11. The statutory exemption for portfolio interest reflects the difficulty of taxing highly mobile debt capital. The exemption for capital gains represents an incentive to foreign persons to invest in U.S. capital markets and a concession to the administrative difficulties of determining gain and collecting tax where the income is not physically paid from U.S. sources.
 12. Treaties also suggest another explanation for the nondiscrimination rule—to protect the bargain agreed to by the parties. Treaties limit withholding rates but generally do not impose direct limitations on a source country's right to tax business profits. This creates some risk that the source country may alter the bargain, without directly affecting withholding rates, by changing the way that business profits are taxed to foreign investors. The nondiscrimination rule indirectly prevents this by requiring that changes in the taxation of business profits burden domestic and foreign capital equally.
 13. The shareholder allocation prototype treats foreign taxes by statute like U.S. taxes, but we do not recommend adoption of that prototype.
 14. The following examples illustrate the tension between a policy of avoiding additional taxation of foreign source profits and a policy of collecting one level of U.S. tax on profits from all sources. Assume that a U.S. individual owns 100 percent of a domestic corporation that in turn owns 100 percent of a foreign corporation. The U.S. corporate rate is 34 percent, the individual rate is 31 percent, and the United States has adopted a dividend exclusion system. The foreign corporation earns \$100 of foreign profits in the relevant taxable year and pays foreign taxes of \$25. The foreign subsidiary later distributes the after-tax income to its domestic parent, which distributes the dividend (net of any U.S. tax) to its sole individual shareholder. If the domestic parent is required to include \$100 of profits in income for the taxable year of the distribution but is given a tax credit of \$25 against its U.S. tax liability, and the individual is allowed to exclude the dividend altogether, then the aggregate level of tax of the foreign profits will be no greater than if the profits were from domestic sources. No additional taxation will exist. Compared to current law, exempting the dividend in the hands of the individual shareholder will significantly reduce the United States' portion of the aggregate tax burden borne by the foreign profits. The United States' portion of the total tax paid will only be \$9 out of \$34, or 26 percent of the total, compared to the United States' portion under current law: \$29 out of \$54, or 54 percent of the total.
- If, in contrast, the tax regime provides a credit for the \$25 of foreign taxes paid by the subsidiary to the domestic parent but requires the individual shareholder to pay tax upon the appropriate portion of the subsequent distribution by the parent under the dividend exclusion prototype, then the foreign profits will bear an additional amount of tax relative to a similar amount of domestic profits. The domestic corporation will owe \$9 of additional tax upon receipt of the distribution from the foreign shareholder, and the individual shareholder will owe a tax of \$15 upon the subsequent distribution of a grossed-up dividend of \$49. The foreign profits will have been subject to aggregate foreign and U.S. taxation of \$49, in comparison with aggregate taxation of \$34 for similar profits from domestic sources. Under this approach, the United States' portion of the total taxes paid for such income will be \$24 out of \$49, or 49 percent of the total. However, the total tax burden on the earnings decreases to \$49 from current law's \$54, because there is only one level of U.S. residual tax.
15. This problem would be even more severe if shareholder credits in a shareholder allocation or imputation credit system were actually refundable, rather than simply available to offset tax liability on other income.
 16. See Sections 2.C and 11.D.
 17. See Section 4.D.
 18. See Section 3.J.
 19. For domestic corporations owned by foreign shareholders, the first level of tax is the normal domestic corporate tax and the second level is the 30 percent withholding tax on dividends. For a U.S. branch of a foreign corporation, the first level is the corporate tax on the branch's U.S. business income and the second level is the branch profits tax under IRC § 884(a).

20. Other countries with integrated tax systems, as a rule, have not extended benefits of integration to U.S. shareholders except as a result of tax treaties. However, the U.S. treaties with the U.K., Germany, and France extend some benefits of integration to U.S. shareholders in certain cases. On the other hand, Australia generally extends the benefits of integration to foreign shareholders by statute. See Appendix B.

21. The following example illustrates the problem in the context of an imputation credit system that refunds imputation credits to foreign shareholders. The issues would be the same in a dividend exclusion system that refunded corporate tax to foreign shareholders. Assume, for example, that two domestic corporations each earn an annual pre-tax profit of \$100. Corporation A has one shareholder, a U.S. resident individual. Corporation B also has one shareholder, a nonresident alien individual who resides in a country that has a tax treaty with the United States. The tax treaty limits the U.S. dividend withholding rate to 15 percent for portfolio investors (including the shareholder of corporation B) and contains a standard prohibition against discrimination based on capital ownership. Assume also a 34 percent corporate tax rate, a 31 percent individual tax rate and that corporate taxes are credited to shareholders at the 31 percent individual rate.

If neither corporation distributes earnings, each pays a tax of \$34 on its \$100 profit. No discrimination exists between the two corporations, and the withholding rules are not implicated. If, instead, each corporation distributes one-half of profits, the domestic shareholder receives a cash distribution of \$33, an imputation credit of \$14.83, and a grossed-up dividend, i.e., including credit of \$47.83. See Section 11.B. The domestic shareholder will have a tax liability with respect to the gross distribution of \$14.83, which will be exactly offset by the imputation credit. Thus, for corporation A both distributed and retained earnings are taxed at a 34 percent rate.

There is a significantly different result for corporation B. The foreign shareholder receives a cash dividend of \$33. If he also receives an imputation credit of \$14.83, his gross dividend will be \$47.83. The withholding tax on this distribution will be \$7.17, entitling him to a refund of \$7.66. In this case, undistributed profits are taxed at 34 percent, but distributed profits are taxed at 18.7 percent (\$50 of pre-tax income that bears \$17 – \$7.66 of tax).

22. In the past, countries with nonintegrated tax systems, including the United States, have responded that this argument is highly stylized, that it ignores the economic reality that profits distributed to foreign shareholders bear a higher level of tax than profits distributed to domestic shareholders, and that such an integration regime is discriminatory. As noted in the text, this response has generally been rejected by countries with integrated systems, although the United States has had some success in negotiating partial integration benefits for its shareholders.

23. See Section 2.A.

24. This would not be true in an integration system that imposed both a nonrefundable compensatory tax and a withholding tax on dividends. A nonrefundable compensatory tax combined with a withholding tax would subject distributed preference income to two levels of tax, rather than the one level of tax imposed under current law. (Note that, if a compensatory tax were adopted in CBIT, the current withholding tax on dividends would be repealed.) See Section 4.E.

25. See Section 3.I.

26. See Section 6.D, which describes such an approach for tax-exempt entities. Such an approach would minimize portfolio shifts by foreign shareholders and would provide an opportunity for achieving greater parity between debt and equity investments in U.S. corporations by foreign investors.

Chapter 8

1. Presumably, if shareholders were not taxed on gains, they would not be allowed losses on stock sales.

2. As described in Section 13.B, we accept the traditional view of dividends, under which the value of \$1 of retained earnings is \$1 as long as the managements of corporations maximize firm value. Under the new view, also described in that section, distributions to shareholders in the form of dividends are unavoidable. For a dividend paying corporation in this view, an incremental dollar of retained earnings raises share value by less than \$1.

3. The value of stock in a corporation that has retained earnings may include the value to a prospective purchaser of the resulting capital loss that will be realized when the stock is resold after the earnings are distributed, although the value of this loss to a purchaser depends on the purchaser's marginal tax rate and ability to use capital losses, and the amount of time the purchaser expects to elapse before the earnings are distributed and it dispose of the stock.

Assume, for example, that a dividend exclusion system is adopted and that the corporate and shareholder tax rates both are 34 percent. A corporation earns \$100 of fully-taxed income in year one and pays \$34 in tax, so it has retained earnings of \$66 and an EDA balance of \$66. How much should a prospective purchaser pay for all the stock? The answer is that the purchase price of the stock will vary between \$66 and \$100, depending on the tax attributes of the purchaser and the expected timing of the distribution of the \$66 of retained earnings and the purchaser's resale of the stock.

The after-tax value of the retained earnings to any purchaser is \$66. In addition, if the corporation distributes all of its earnings, the shareholder will realize a capital loss upon disposition equal to the amount paid for the stock. (The amount realized on the disposition would be zero, assuming the corporation has no assets after the distribution.) In theory, the value of the capital loss may be as great as \$34 (and thus, a purchaser would be willing to pay \$100) if: (1) the distribution of the earnings and the disposition of the stock are expected to occur very shortly after the purchase of the stock, (2) the purchaser expects to have sufficient capital gains against which to use the capital loss, (3) the purchaser expects to face a 34 percent marginal tax rate, and (4) the distribution does not reduce the basis of the shares.

The value of the capital loss may be much less. The value of the capital loss will be less if the shareholder does not dispose of the stock immediately, cannot use the capital loss immediately, or is subject to tax at a marginal rate of less than 34 percent. If, for example, the capital loss is worth zero, the purchaser would pay only \$66 for the stock.

4. Depending on marginal tax rates, the tax system may collect as little as no tax or as much as two full levels of tax on corporate earnings. If the corporate tax rate does not exceed the individual rate, the tax system may collect virtually no tax on corporate earnings if, for example, a seller of stock is tax-exempt and a purchaser is taxable. In that case, the seller will not pay tax on capital gains attributable to fully-taxed retained earnings, but, after the earnings are distributed, the taxable purchaser can sell his stock and realize a capital loss. That loss may be valuable enough to offset tax collected on the earnings at the corporate level. On the other hand, the tax system may collect two full levels of tax if, for example, a seller of stock is taxable and a purchaser is tax-exempt. In that case, the initial shareholder's capital gain is taxed in full, but the offsetting capital loss creates no tax benefit to the purchaser. Current law in some cases limits the availability of a capital loss following a distribution. See, e.g., IRC § 1059 (basis reduction for extraordinary dividends).

5. The analysis in the text oversimplifies this issue to illustrate the general point. The analysis can be complicated if preferences are subsequently distributed or if the preference is a deferral or tax credit rather than an exclusion of income.

6. This could be accomplished by increasing inside basis in a manner similar to the treatment of electing partnerships under IRC § 754 and electing purchasers of corporate stock under IRC § 338. Applying such a rule to small acquisitions of stock (particularly where there is frequent public trading) would be administratively impossible; however, using a dividend reinvestment plan could provide some relief. See Chapter 9.

7. Halperin and Steuerle (1988) indicate that total capital gains in the economy over time are approximately equal to gains attributable to inflation plus retained earnings. Their research indicates that the real gains in value in one sector, e.g., land in the 1970s, tend to be offset by real losses in another sector, e.g., corporate stock in the 1970s. According to Halperin and Steuerle, from 1948 to 1985 the total change in economywide net worth equals the sum of (1) average net investment of 12.3 percent of net national product (NNP), (2) average inflationary gains in value of 16.1 percent of NNP, and (3) average real gains in value of -2.6 percent of NNP. See also Steuerle (1991). If total capital gains are attributable only to inflationary increase in asset values and retained earnings, the case for reduced taxation of nominal capital gains on corporate stock is much stronger.

8. See IRC §§ 705 and 1367. Treas. Reg. § 1.1502-32 provides a comprehensive set of basis adjustments for C corporations that are members of a consolidated group.

9. In cases where expected increases in future earnings that are reflected in the price of equity never materialize, an equity holder may realize a gain that never creates a corresponding amount of income to be taxed under CBIT at the entity level. In that case, however, the purchaser of the equity interest will realize a corresponding loss, and disallowing both the gain and the loss achieves a roughly accurate solution.

Example. A purchases Corp. X stock for \$100, when Corp. X is expected to earn \$1,000 per year. One year later, Corp. X announces a new product line that is expected to increase its earnings to \$1,500 per year. A sells his stock to B for \$150. Six months later, one of Corp. X's competitors introduces a superior product. Corp. X's expected future earnings decline to \$1,000 per year. B then sells his stock for \$100.

Without taking into account the time value of money, the marginal tax rates of the two investors, or capital loss limitations, A's \$50 gain is offset by B's \$50 loss.

10. A complete exemption also may create an incentive to restructure transactions. For example, because investor level gains on a sale of stock would be exempt but entity level gains on a sale of assets would not, there would be a considerable incentive to structure acquisitions of corporations with appreciated assets as stock sales rather than asset sales. This is similar to the bias that exists under current law, under which sales of stock result in only one level of tax, while sales of assets, which typically either are preceded by a liquidating distribution of assets or followed by a liquidating distribution of sales proceeds, generally result in two levels of tax.

11. Proposals made in other contexts, e.g., a mandatory IRC § 338 election, might be considered. Current law permits certain purchasers of 80 percent or more of a corporation's stock to elect to treat a stock purchase as an asset purchase. A mandatory IRC § 338 election, adapted for CBIT, would require recognition of gain at the entity level if a certain percentage of the equity of a CBIT entity changes hands. A mandatory IRC § 338 election may be more palatable in an integrated system than under current law, because any gain realized would be subject to only one level of tax. Gain would be taxed solely at the entity level, and no additional investor level tax would be due.

Another possible approach would tax capital gains realized on the sale by a CBIT entity of its equity interest in another CBIT entity, e.g., a corporation's sale of the stock of a subsidiary. For the reasons discussed above, taxing capital gains on CBIT equity realized by a CBIT entity would tend to impose a second level of tax on earnings. Taxing entity level capital gains on CBIT equity also would create disparities between equity investments held directly by individuals and those held through other entities, e.g., affiliated groups of corporations. On the other hand, extending the exemption for capital gains on CBIT equity would multiply the potential for deferral of entity level tax. Without special rules limiting tax-free contributions of assets to subsidiaries or partnerships, CBIT entities would be able to structure some sales of assets as sales of CBIT equity.

12. Auerbach (1990) discusses alternative means of retrospective capital gains taxation that approximate accrual-equivalent capital gains taxation.

13. The text focuses on the different sources of capital gains for traditional forms of equity and debt. The sources of capital gains for hybrid instruments may reflect both equity-type and debt-type gains. For example, fixed rate, nonconvertible, cumulative preferred stock of a creditworthy company may react to interest rate changes in much the same way as debt.

14. The credit quality of debt may change because of changes in the underlying value of the firm. For example, debt issued by a manufacturing firm might rise in value because the demand for the firm's product rises unexpectedly, thereby increasing the likelihood that the firm will pay off the debt in a timely manner. In essence, the debt is more valuable because the firm has become more valuable. The rise in value represents a capital gain to the debtholder. Such a gain is analogous to the gain an equity holder would realize from the same event, and the deferral concerns are the same.

15. An unexpected fall in the market interest rate, for example, could generate a capital gain to the holder of long-term, fixed rate, noncallable debt. The value of the debt would rise until the debt's interest payments would provide a new investor with a return equal to the market interest rate.

Example. A noncallable perpetuity is a debt instrument that never matures. If the interest rate at issuance is 10 percent, a \$100 perpetuity would pay \$10 of interest per year. If the market rate of interest drops unexpectedly to 5 percent, the value of the perpetuity would double to \$200, so its \$10 annual interest payment would represent a 5 percent rate of return on the value of the debt. If the debt holder sold the perpetuity, he would realize a capital gain equal to the \$100 increase in value.

The effect of changes in interest rates is less pronounced for short-term bonds because there is a shorter period over which off-market interest payments will be received and because the present value of the prepayment of principal is a more significant component of price. For example, if the bond in the example above were scheduled to mature in one year, an unexpected drop in interest rates would cause the bond to increase in value only to \$104.76 ($\$110/1.05$), rather than to \$200 as with the perpetuity. However, a change in market interest rates creates an equal and offsetting gain or loss to the borrower. A decline in the market interest rate increases the amount the borrower must pay to eliminate his debt. If the borrower repurchased the debt in the example for \$200, he would recognize the loss in the form of a \$100 deduction. See Treas. Reg. § 1.163-4(c). If market interest rates increased, the borrower could repurchase his debt for less than its issue price and would realize income from the cancellation of indebtedness. See Treas. Reg. § 1.61-12(c).

Interest rate changes also can affect the value of equity. For example, an increase in interest rates may decrease the value of common stock to the extent that stock price reflects the discounted present value of future cash flows on the stock because the higher interest rate also will decrease the discounted present value of future cash flows from corporate assets. An increase

in interest rates also may create an offsetting increase in the value of common stock if a corporation has outstanding low-rate noncallable debt.

16. Thus, if CBIT included a compensatory tax and gains on CBIT equity were exempt, considerations of simplicity may support exempting gains and denying losses on CBIT debt (to both borrowers and lenders) as well. Although gains and losses on debt that are attributable to changes in interest rates represent real accretions to wealth (or real reductions in wealth) to borrowers and lenders, distinguishing between gains and losses on debt arising from changes in the value of the firm and those arising from changes in interest rates would be virtually impossible. Further, a change in interest rates creates no net gain in the tax system, because the lender's gain or loss is offset by the borrower's loss or gain. To the extent that debt holders and equity holders face the same tax rate and would pursue the same realization strategy, the Treasury would collect the same tax revenue if such gains and losses were included in taxable income as it would if such gains and losses were ignored. This conclusion is weakened if differences in tax rates and differences in the timing of realization are taken into account. Excluding all gains and losses on debt could create a net loss of tax revenue to the system in some cases, e.g., if interest rates increase and the lender is tax-exempt and the borrower is taxable. Strengthening the case for exempting such gains and losses is the observation that they are most important for long-term, fixed rate debt with call restrictions. Long-term, fixed rate debt has become less important in recent years. For nonfinancial corporations, the ratio of long-term debt (corporate bonds, mortgages, and tax-exempt bond) to total credit market debt has fallen from 71.6 percent in 1962 to 56.4 percent in 1990. See Flow of Funds Accounts (1991). To the extent that even long-term debt has more flexible interest rate adjustment than in the past, long-term fixed rate debt is even less important than the above calculation would suggest.

17. See IRC § 302. A redemption also may qualify for sale treatment if it terminates a shareholder's interest in the corporation or is made to a noncorporate shareholder in a partial liquidation.

18. The analysis in the text generally applies to individual shareholders. Corporate shareholders, which are entitled to a dividends received deduction (DRD), may favor dividends over share repurchases even under current law. A corporation entitled to a 100 percent DRD would always prefer a dividend, which would be entirely tax-free and would preserve share basis to offset later gains. A corporation entitled to a 70 or 80 percent DRD might prefer dividends in some cases.

The problems raised by share repurchases under the classical system are discussed at length in the American Law Institute (1989), which recommends adopting "a minimum tax on distributions" of 28 percent (the maximum rate applicable to individual taxpayers at the time) on the gross amount of any nondividend distribution to ensure that the second level of tax is collected. See Section 12.C.

19. Thus, a shareholder with a basis of \$150 in his stock would pay the same amount of tax on a \$200 distribution and a \$200 payment in full redemption of his stock. In each case, the \$200 payment would result in \$50 of capital gain.

The rules determining stock basis should be reexamined under shareholder allocation. Although each share of stock has traditionally been viewed as having a separate basis, an aggregate basis approach may be more suitable under shareholder allocation, as under the partnership rules. For example, if aggregation is not permitted and a shareholder holds both low basis shares and high basis shares, a pro rata distribution might result in recognition of gain on the low basis shares, while an equivalent amount paid in full redemption of only a portion of the stock might be tax-free because the shareholder could choose to surrender only high basis shares.

20. A DRIP would reduce the bias against share repurchases out of taxable income. DRIPs are discussed in Chapter 9.

21. Some have contended that the best approach would recharacterize a share repurchase as a pro rata dividend, followed by sales of shares among shareholders to reflect the fact that, after a share repurchase, some shareholders have cash and others have an increased proportionate interest in the corporation. All shareholders would pay tax on ordinary dividend income and would add that amount to share basis. Selling shareholders would recognize gain or loss measured by the difference between the amount realized on the sale and their basis in the shares. See Chirelstein (1969). Abandoning the realization requirement to tax nontendering shareholders would create additional complexity and administrative difficulties. Indeed, since integration reduces the tax incentives for share repurchases over dividends in comparison to current law, a change in that policy does not seem appropriate or necessary. Moreover, allocating the EDA balance among all shareholders would require income allocations as complex as those required in the shareholder allocation prototype. See Chapter 3.

22. Attempting to treat third-party sales of shares as dividends that would be excludable to the extent of the issuing corporation's EDA balance would entail information reporting (by brokers to the issuing corporations and by issuing corporations to selling shareholders and the IRS) to an unprecedented degree. Such a system would be highly impractical and undesirable.

23. Rules similar to those in IRC § 302 would be retained. Because corporations, for example, may have an incentive to use redemptions of tax-exempt shareholders' stock in a dividend exclusion system, it might become necessary to reduce EDA balances in proportion to shares redeemed.

24. Example. A corporation owns an asset worth \$100 and its sole shareholder has a basis of \$100 in her stock. The value of the asset declines to \$60, and the shareholder sells her stock for \$60, realizing a \$40 capital loss. If the corporation then sells the asset for \$60, it too will realize a capital loss.

A shareholder level loss that mirrors an unused net operating loss at the corporate level is similar to a shareholder level loss attributable to unrealized depreciation.

Example. The facts are the same as in the preceding example, except that the corporation sells the asset before the shareholder sells her stock. The corporation has no taxable income (and no EDA balance), so that the \$40 loss represents an NOL carryforward available to offset future income. The shareholder sells her stock for \$60 and realizes a \$40 capital loss.

25. Under current law, capital losses of individuals are allowed only to the extent of capital gains plus \$3,000 of ordinary income. See IRC § 1211(b). It would be possible to allow capital losses on corporate stock only to offset capital gains on corporate stock (plus \$3,000 of ordinary income) and generally match loss and gain duplication to reduce loss duplication. See also IRC §§ 269 and 382-84; Treas. Reg. §§ 1.1502-21 and -22.

Chapter 9

1. A system of basis adjustments for retained earnings is inherent in the shareholder allocation prototype. See Chapter 3. A DRIP also may be appropriate in the imputation credit prototype described in Chapter 11. Section 11.I discusses special considerations in adopting a DRIP in the imputation credit prototype. A DRIP would be unnecessary under CBIT if gains and losses are not taxed to investors, because basis in such investments would be irrelevant.

2. This would not be true in the case of a dividend deduction system, discussed in Chapter 12. Under such a system, deemed dividends would be taxable to shareholders but would give rise to a corporate level deduction. Thus, at minimum, a DRIP in a dividend deduction system would require shareholder consent, as under current law. While we do not address the issue further, we question whether a DRIP should be allowed in a dividend deduction system. Rate arbitrage might occur if a corporation and its shareholders can elect a current corporate level deduction in return for a shareholder level tax.

3. For example, under the dividend exclusion prototype, a shareholder must meet a 45 day holding period in order to exclude dividends received. See Section 2.B.

4. For example, dividend stripping generally results in basis reduction under current law, and the same rules may be appropriate in the context of a DRIP. Basis allocation rules also might be used.

Example. The facts are the same as in Example 1, except that the fair market value of X shares at the time of the DRIP distribution is \$10 per share. Under these circumstances, the basis of both Lot A and Lot B shares will exceed fair market value under either allocation method. In these circumstances, basis sufficient to bring the basis of all shares up to fair market value should be so allocated. The balance should be allocated to all shares, pro rata.

5. The EDA would continue to be available to pay excludable dividends (or interest, in CBIT) on any class of stock (or debt, in CBIT). In theory, it would be possible to maintain a separate EDA, as well as a deemed dividend account, for each class of stock. However, such an approach would require unacceptably complex allocations of the EDA among classes of stock, similar to the allocations of corporate income required under the shareholder allocation prototype. See Chapter 3.

6. We rejected three alternative rules. First, the stacking rule could treat cash distributions first as a return of capital to the extent of previous deemed dividends. The rule recommended in the text is more favorable than this rule for any corporation with a remaining EDA balance, because shareholders would generally prefer excludable dividends to basis reduction. Second, the stacking rule could follow current law and treat cash distributions as a return of capital only after a corporation's earnings and profits are exhausted. Deemed dividends that had been declared would reduce earnings and profits by the amount of the deemed dividend and cash distributions would be tax free to the shareholder to the extent treated as payments out of the remaining EDA. This rule would be consistent with the current treatment of corporate dividends and with the notion that shareholders recover capital only after recovering earnings. Under this rule, however, a corporation that had used the DRIP to eliminate its EDA balance but had additional earnings and profits attributable to retained preference income would be

required to pay taxable dividends before it could treat distributions as a return of capital. While corporate shareholders entitled to a DRD might prefer taxable dividends to basis reduction, we believe that the rule in the text is more favorable to taxpayers in most cases. Finally, cash distributions might be treated entirely as dividends and no earnings and profits account or account of deemed dividends would be kept. The advantage of the third alternative is that corporations would not need to keep an account of deemed dividends. This approach, however, may discourage use of DRIPs.

7. We would not permit DRIPs for debt in CBIT because interest is generally paid in cash as it accrues. As Section 4.G discusses, CBIT would generally retain OID or imputed interest rules to distinguish payments of interest from payments of principal. CBIT would not, however, retain the current rules governing the timing of imputed interest income.

This approach raises the question of how accrual, e.g., zero-coupon, and payment-in-kind bonds would be treated. Consideration should be given to adopting rules that would prevent accrued discount (which, like interest, is not taxable to a debtholder when received) from being taxed as capital gain if the debt instrument is sold before the discount is paid. One approach would be to maintain the current OID timing rules. Accrued discount would increase a debtholder's basis (but would not be includable in income) and would decrease the issuer's EDA (but would not be deductible). Similar issues are presented by discount preferred stock. See IRC § 305(c).

8. Mechanically, a mandatory DRIP would operate like the elective DRIP, except that a corporation would be required to reduce its EDA to zero at the end of each year through deemed or actual distributions. A mandatory DRIP might cause restrictions on the forms of equity eligible for DRIP distributions to be more desirable.

Chapter 10

1. Auerbach (1990) presents an overview of issues relating to gains and losses during the transition to integration.

2. As indicated in Chapter 13, we believe the best empirical evidence supports the traditional view of dividends, which holds that the existing two-tier corporate tax has not been fully capitalized into share values. Accordingly, we believe that integration may create some transition gains to owners of corporate stock but that such gains will not be as great as those anticipated by advocates of the new view.

3. The second and third transition concerns described in the text are sometimes referred to as carryover problems.

4. See Graetz (1977).

5. See Section 2.B and Section 4.D, respectively.

6. The stacking order rules for distributions from the EDA (see Sections 2.B and 4.D) may prolong the deferral of the tax on the retained earnings, however.

7. The American Law Institute Reporter's Study Draft (1989) on corporate tax reform contains a deduction for dividends paid that would apply only to new equity. The proposals avoid the complexity of tracking new and old equity instruments by limiting the deduction to the product of a specified rate and capital contributed after the date of enactment of the proposals, less extraordinary distributions. American Law Institute (1989). See Section 12.C.

8. The current rules governing the conversion of a C corporation, i.e., a corporation taxed under the classical system, to one of the various passthrough entities suggest the difficulties and complexities that would be involved in attempting to isolate old equity from new equity. These rules, which include the rules that apply to C corporations that convert to a partnership, an S corporation, or a RIC or REIT are concerned in varying degrees with preventing corporate income attributable to preconversion years from escaping the two-tier tax. None provides a particularly satisfying approach to dealing with the transition to an integrated corporate system.

For example, an approach modeled on the existing rules for taxing C corporations that convert to partnerships would treat the corporation as though it had distributed all its assets to its shareholders in a liquidating distribution in which built-in gain or loss with respect to the assets is realized at the corporate level and built-in gain or loss with respect to the stock is realized at the shareholder level. The shareholders would then be treated as recontributing the assets to the corporation. This mark-to-market approach would tax all the built-in gain or loss with respect to assets at the corporate level and all the built-in gain or loss with respect to stock at the investor level. (Alternatively, an approach modeled on the existing rules for taxing C corporations that convert to passthrough status as a RIC or REIT would confine the mark-to-market approach to the corporate level, with shareholders taking a carryover basis in their stock. See Notice 88-19, 1988-1 C.B. 486.) Although

the mark-to-market approach would eliminate any long-range transition effects from the change to an integrated corporate system, the substantial and immediate tax cost, together with the administrative burden that would ensue from the need to value all corporate assets, makes this approach unacceptable.

A transitional approach also could be modeled on the existing rules for taxing C corporations that convert to S corporation status. Current law does not treat the conversion as a taxable event. However, S corporation shareholders are taxable on distributions from earnings and profits accumulated in C corporation years to the extent the S corporation's distributions exceed its cumulative taxable income. IRC § 1368. In addition, IRC § 1374 provides that if the S corporation recognizes gain on an asset held at the time of the conversion within a 10 year period following the conversion, the gain is subject to a corporate level tax. The total amount of gain subject to corporate level tax cannot exceed the net built-in gain inherent in the corporation's assets at the time of the conversion. IRC § 1374(c)(2). Certain items of income and deduction that are attributable to periods before the conversion but have not yet been recognized are taken into account in computing the corporation's built-in gain. IRC § 1374(d)(5). This approach avoids the immediate tax cost associated with the partnership conversion model but does not avoid the valuation problem. It is administratively more burdensome than the partnership conversion model because the corporation has to make valuations on an asset-by-asset basis and monitor assets held at the time of the conversion (as well as income and deduction items attributable to pre-conversion periods) for a 10 year period. In addition, this approach distributes the tax burden of the transition to integration in an unequal manner because it allows those corporations with wasting assets or assets on which gain can be deferred beyond the end of the 10 year period to escape corporate level tax on the gain.

9. The choice between limiting integration to newly contributed equity and extending it to all equity reflects assumptions about the extent that investor level taxes affect corporate dividend decisions and share prices. If dividend payments are unavoidable and shareholders do not place an intrinsic value on dividends relative to retained earnings, the classical system does not create any bias against dividend distributions, and investor level taxes on dividends are already capitalized into share values. This is the new view of dividend distributions. See Section 13.B. If that view is correct, then applying integration to dividends from accumulated as well as newly contributed equity would not encourage dividends and would confer a transition gain to holders of existing equity, the price of which would increase. As discussed in Chapter 13, however, we reject the new view. Accordingly, we believe that extending integration to existing equity, particularly under a phase-in, would not confer unacceptable transition gains, and that retaining the classical system for existing equity would maintain the tax bias against dividends for such equity.

10. The Department of the Treasury recommended a phase-in approach in its 1984 proposal to provide relief from the double taxation of corporate income. That proposal generally would have allowed corporations a deduction equal to 50 percent of dividends paid to their shareholders and also would have reduced the corporate dividends received deduction from 75 percent to 50 percent. The proposed 6 year phase-in rule would have allowed a 25 percent dividends paid deduction in the first year that would have increased by 5 percentage points in each of the next 5 calendar years. Similarly, the dividends received deduction would have been 75 percent in the first year, with a 5 percentage points decrease in the deduction for each of the next five calendar years. See Treasury I, Vol. 2, pp. 136-137, 140.

11. The imputation credit prototype described in Chapter 11 could be phased in. The imputation credit prototype contemplates additions to the SCA and associated shareholder level credits by reference to the maximum tax rate applicable to shareholders, currently a 31 percent rate. Where the corporate tax rate is less than the maximum shareholder rate, it would be appropriate to base shareholder credit account and imputation credit amounts on the lower corporate tax rate. This level of integration might be phased in two alternative ways. First, a phase-in rate might be set as a percentage of the maximum shareholder rate to accomplish a smooth phase-in of integration. For example, a 5 year phase-in could base the shareholder credit account additions and allowable shareholder credits on a rate equal to 20 percent of 31 percent (6.20 percent) in the first year, 40 percent of 31 percent (12.40 percent) in the second year and so on. Alternatively, the imputation credit prototype might be phased in by linking imputation credits to a shareholder tax rate less than the maximum individual rate. For example, SCAs and imputation credits might be based on the 15 percent individual rate for a several years before moving to the 31 percent rate. If only partial distribution-related integration were contemplated, this system could be used indefinitely. Such a system would be similar to the United Kingdom's imputation system. See Appendix B.

12. See generally Graetz (1977).

13. Most corporate debt may be called without premium after a period of time, typically 5 to 7 years. Debt instruments typically permit the debt to be called earlier upon payment of a redemption premium. A CBIT phase-in is likely to significantly mitigate the increase in the cost of borrowing because corporations would be able to call their debt in substantial part before the disallowance of the interest deduction is fully phased in.

14. See Section 4.G.

15. If an accrual method taxpayer accrues but does not pay interest before the CBIT phase-in begins, then pays the previously accrued interest in a CBIT transition year, this approach assures that either holder level tax (in the form of the portion of dividends and interest includable in the income of shareholders or debtholders) or compensatory tax is paid on such interest.

16. The formula for transition years' additions to the EDA would be:

$$\begin{aligned} \text{Additions to EDA} = & p \left(\frac{\text{U.S. tax paid for taxable year}}{.31} - \text{U.S. tax paid for taxable year} \right) \\ & + p(\text{dividends and interest received from CBIT entities}) + p(\text{allowable interest deduction}) \end{aligned}$$

where p is the transition percentage.

17. As Section 4.D discusses, payments of interest and dividends reduce the EDA in the order in which they are made. These examples assume, for purposes of illustration, that interest payments are made first and thus reduce the EDA first.

PART IV

Introduction

1. Australia, Denmark, Finland, France, Germany, Ireland, Italy, New Zealand, and the United Kingdom have all adopted imputation credit systems. See Appendix B for a discussion of certain of these countries' systems.

2. Differences among dividend exclusion, dividend deduction and imputation credit systems of integration are due to differences in tax rates applicable to different shareholders or types of income. See Appendix C.

Chapter 11

1. Individual shareholders subject to rates less than 31 percent would be allowed to use the credits against tax on other income. See Section 11.E.

2. The grossed-up dividend is the cash dividend received by the shareholder divided by one minus the maximum individual tax rate (cash dividend/ $1 - .31$).

3. Additional restrictions on the amount of the credit would be imposed to prevent streaming of credits to taxable shareholders, and consideration could be given to requiring corporations to frank dividends with credits at the full 31 percent rate as long as there is a balance in the SCA. See Section 11.F.

4. See also note 48, below.

5. A compensatory tax may take either of two forms. First, it might apply only to distributions of earnings that have not been taxed at the full corporate rate. This requires a corporation to determine the amount of corporate tax deemed to have been paid with respect to each distribution and to pay additional tax to the extent that earnings used to make the distribution have not been subject to tax at the full corporate rate. The French and German systems follow this model. See Appendix B.

Alternatively, the compensatory tax might be imposed on all distributions, regardless of the amount of corporate tax previously paid, with the compensatory tax allowed as a credit against regular corporate tax. Under such an "advance tax" system, a corporation is not required to determine explicitly the amount of tax deemed paid on a particular distribution. In an advance tax system in which the shareholder credit is computed using a corporate tax rate of 34 percent, a corporation is required to pay a compensatory tax on all dividends equal to 51.5 percent of the dividend ($.34/.66$). The corporation would be entitled to credit this tax against its regular corporate tax liability. Shareholders would be entitled to a credit equal to 51.5 percent of the amount of any cash distribution, and the credit would be included in income together with the cash distribution. The 51.5 percent rate applied to net cash dividends is used in lieu of applying the 34 percent corporate rate to a grossed up amount; 51.5 percent of a \$66 cash dividend (\$34) equals 34 percent of \$100, the \$66 cash dividend grossed up at the 34 percent rate ($\$66/.66$). A corporation's ability to credit the compensatory tax against its regular corporate tax liability means that the compensatory tax results in additional tax liability only to the extent that distributions exceed the amount of fully-taxed earnings between the two regimes. The United Kingdom's Advance Corporation Tax (ACT) system represents an example of the second type of compensatory tax.

The principal substantive difference is that the advance tax system implicitly treats distributions as made first out of fully-taxed income, while a compensatory tax can, in theory, be combined with any stacking rule. In practice, most existing compensatory tax systems, such as those in France and Germany stack distributions first against fully-taxed income. While they differ mechanically, the two alternatives have similar economic impact on corporations subject to the compensatory tax.

6. If a compensatory tax is set at the corporate tax rate and is refundable to shareholders so it acts solely as a withholding tax, all distributed income is taxed only once, at shareholder rates. Although the tax is collected at the corporate level, rather than at the shareholder level, no net separate corporate level tax is imposed. The compensatory tax, however, serves to ensure payment of the shareholder level tax as preference or shielded foreign source income is distributed. The refund of imputation credits associated with distributions means that the net amount of tax borne by the distribution will be determined solely by the shareholder's tax rate and taxable or tax-exempt status.

7. Timing preferences, as well as exclusion preferences, would increase the corporate level cost of dividends in a compensatory tax system. A compensatory tax requires current payment of tax on distributed preference income, thus removing the tax deferral created by timing preferences. Consider a firm with \$100 in economic income in year one and \$100 worth of timing preferences. Suppose further that in year two its economic income is zero (but tax is due on the \$100 deferred from the year before) and that the firm distributes all of its income in year one. With a compensatory tax, the firm has to pay \$34 in year one; there is no mainstream tax to which the credit can be applied. Therefore, it carries over the \$34 credit to year two, so that in year two its tax liability is zero. In contrast, under a credit limitation system, no tax is paid in year one, but \$34 is paid in year two. Thus, if the firm's economic income is distributed as it is earned, the present value of timing preferences to the firm under the credit limitation scheme is greater than under the compensatory tax scheme. On the other hand, taxable shareholders would receive credits in year one in a compensatory tax regime that they would not receive in a credit limitation system. The overall effect, therefore, would depend on the relationship of the compensatory tax rate to that of the shareholders.

8. The imputation credit prototype, like the dividend exclusion prototype, is not expected to change significantly corporations' provision for income tax expense or the determination of taxes currently payable or payable at a future date for financial accounting purposes. Note 1 in Chapter 4 discusses the possible effect of a compensatory tax on corporate financial reporting.

9. Mechanically, one can determine which distributions are made out of fully-taxed income either by tracing taxable and preference income or by tracking taxes paid. A tracing-of-income approach requires the corporation to maintain different accounts for earnings and profits that have been taxed at different rates, including different accounts for income earned in different years, if tax rates have changed from year to year. We consistently recommend tracking taxes paid rather than tracing taxable income. See Section 2.B, Section 4.D, and Section 12.A. Tracking taxable income is significantly more complicated than tracking taxes paid and does not seem to offer any offsetting advantages. Australia's imputation credit system tracks taxes paid. The French and German imputation credit systems illustrate the complexity of tracking income. See Appendix B.

10. The following example compares three alternative stacking rules. The example assumes that the corporation pays tax at either 34 percent (nonpreference income) or 0 percent (preference income) and that corporate taxes paid are credited at the 31 percent shareholder rate.

	Alternative Stacking Rules		
	Stack Preferences Last	Stack Preferences First	Pro Rata Stacking
Economic Income	100	100	100
Preference Income	10	10	10
Taxable Income	90	90	90
Tax (@34%)	30.6	30.6	30.6
Preference Income Available for Distribution	10	10	10
Nonpreference Income Available for Distribution	59.4	59.4	59.4
Cash Distribution	50	50	50
Tax Deemed Paid on Distribution	22.46	17.97	20.22

The "stack preferences last" approach treats each dollar distributed as coming first from nonpreference income. The \$50 distributed is less than the amount of nonpreference income available for distribution, thus, the distribution is deemed to be entirely nonpreference income. The "stack preferences first" approach treats each dollar distributed as coming first from preference income (taxed at zero percent) and then from nonpreference income. Thus, the first \$10 distributed is deemed

to have borne no tax. The pro rata stacking approach treats each dollar as from preference and nonpreference income in the same proportion as the corporation's after-tax preference and nonpreference income. The pro rata approach thus treats each dollar distributed in the example as having borne tax at an effective rate of 30.6 percent $(90/100 \times 34\%) + (10/100 \times 0\%)$. The indirect foreign tax credit allowed under IRC § 902 to certain U.S. corporate shareholders uses a pro rata stacking rule to determine the amount of foreign taxes associated with distributions from foreign corporations to related U.S. corporations.

11. The ACT in effect stacks distributions first against fully-taxed income. For example, assume that the corporate rate is 33 percent and the credit rate is 25 percent, and that a corporation earns \$100 of fully-taxed income and \$100 of preference income in a year. If the corporation distributes \$100, it will pay ACT of \$33.33 $(.25 \times \$100 / .75)$. It will owe mainstream tax for the year of \$33 and will be permitted to credit \$25 of ACT against the mainstream tax. Thus, its tax liability for the year will be \$8. The effect is the same as if the corporation had first paid \$33 of mainstream tax and then paid a \$133.33 grossed-up distribution, deemed to be composed of \$100 of fully-taxed income and \$33.33 of preference income. Compensatory tax of \$8.33 $(.25 \times \$33.33)$ would be due on the distribution. In both cases, the total tax paid is \$41.33.

In contrast, the French and German systems explicitly adopt stacking rules that stack preferences last. The German system uses an "available net equity" account to track taxable and preference income. Available net equity is divided into separate "EK" baskets, consisting of income taxed at various rates. The balances in EK 50, EK 36 and EK 0 represent income taxed at the statutory retained earnings rate, the statutory distribution rate and at a zero rate, respectively. However, the corporation's income may actually be subject to rates other than those for which corresponding EK categories exist. The German system converts each category of income subject to tax at some other rate into equivalent amounts of EK 36 and either EK 50 or EK 0, as appropriate.

The following equation converts pre-tax income subject to tax at some non-EK rate into equivalent amounts of pre-tax income subject to tax at the distribution rate (36 percent) and either the statutory rate (50 percent) or the zero rate: $.36X + (.5 \text{ or } 0) \times (Y - X) = T$, where Y equals the total amount of pre-tax income (known), X equals pre-tax income subject to the distribution rate, $(Y - X)$ equals pre-tax income subject to either the statutory rate or the zero rate, and T equals the amount of tax paid with respect to Y (known). Because X and $(Y - X)$ must be positive, the effective tax rate, T/Y , determines whether the equation must contain the statutory rate or the zero rate (and whether the residual amount of income is converted into EK 50 or EK 0). The following equations convert the pre-tax amounts, X and $(Y - X)$, into their after-tax EK amounts:

$$\begin{aligned} \text{EK 36} &= (1 - .36) \times X \\ \text{EK 50 (If } T/Y > .36) &= (1 - .50) \times (Y - X) \\ \text{EK 0 (If } T/Y < .36) &= Y - X \end{aligned}$$

French corporations are required to segregate fully-taxed income from income potentially subject to the compensatory tax or precompte mobilier for tax accounting purposes. In general, dividends eligible for the imputation credit or avoird fiscal are deemed to be distributed first out of current fully-taxed income, and then out of fully-taxed retained income of each of the immediately preceding 5 years. Once fully-taxed income for this 5 year period has been exhausted, a corporation may choose to allocate a dividend distribution to (1) dividends received from foreign subsidiaries, (2) the long-term capital gains reserve, or (3) other miscellaneous preference income, in any order. France thus allows stacking of dividends last against preference income.

Appendix B discusses these systems in more detail.

12. The formula set forth in the text is based on the formula used to determine the EDA in the dividend exclusion and CBIT prototypes. Multiplying the EDA formula by $(1/.69 - 1)$ converts after-tax income at the 34 percent corporate rate into imputation credits at the 31 percent maximum shareholder rate.

13. If the 34 percent corporate rate were the credit rate, the credit in the example in the text would equal \$17 and the 31 percent shareholder would have an excess credit of \$2.17 to offset other tax liability.

14. This is the method used, for example, by New Zealand. See Appendix B, Section B.5.

15. In general, the treatment of the adjustment as a current year item should extend only to determining the SCA balance. Interest on deficiencies or overpayments should be calculated as under present law. Under a compensatory tax, if liability is adjusted upward, the corporation would either be allowed to use accumulated excess compensatory tax to satisfy the liability or, if there is no excess, would be required to pay additional tax. If a corporation's prior year tax liability is adjusted downward, it would either increase the balance in its excess compensatory tax account, or to the extent it did not use the prior year tax liability to avoid compensatory tax on distributions, it would receive a refund. The corporation would not receive a refund of the corporate tax payment where it has been used to avoid compensatory tax because this corporate tax

payment has been claimed as a credit by shareholders. If a refund were allowed, shareholders would have been able to claim a credit for taxes that the corporation, after allowance of the refund, did not actually pay.

16. The contrary approach, which would treat audit adjustments as an adjustment to the SCA in the taxable year to which the adjustment relates, is complicated and burdensome. Under that approach, a corporation that receives a refund of corporate tax paid may have reported to shareholders credits in excess of its adjusted balance in the SCA. An unanticipated reduction would occur in the SCA for the year in question, which the corporation would have to satisfy by reducing its remaining SCA in that year, or, if there were no remaining SCA, by paying tax equal to the deficit SCA balance (together, possibly, with imposition of penalty or interest).

17. Allowing a loss to be carried back to obtain a refund of some or all of the taxes used to frank a dividend may be appropriate in theory, particularly if the corporation's shareholders are the same at the time of the dividend and the loss, but would be difficult to implement in practice. For purposes of determining shareholder level consequences, the franked dividend could be recharacterized retroactively as a return of capital or a distribution of preference income, depending upon whether the corporation had sufficient retained preferences income at the time of the dividend. If the distribution constituted a return of capital, no shareholder level tax would be due, but basis in the stock would be reduced by the amount of the distribution (which would not be grossed up for the credit). If the distribution were paid out of preference income, the amount of shareholder level tax would be computed only on the amount of the distribution (which also would not be grossed up for the credit). Requiring retroactive adjustments in shareholders' basis or tax liability would be impractical to administer, however, especially if shares of a corporation are widely held.

The argument that tax refunds should be limited to the SCA balance is weakened somewhat because, under the credit limitation system without full refundability, amounts withdrawn from the SCA to frank past dividends may not actually have been used by shareholders. Shareholders cannot obtain refunds of imputation credits, and thus tax-exempt, foreign and some low-bracket shareholders may not enjoy the benefit of some imputation credits. In contrast, in a system with full refundability of imputation credits, all SCA amounts used to frank dividends would be fully used by shareholders. While there is thus some theoretical justification for allowing refunds in excess of the SCA to the extent that the imputation credits were not fully used, it would be impractical to trace the use of the imputation credits by shareholders.

18. Current law contains limitations on the ability of taxpayers to accelerate the recognition of losses or to increase the amount of loss recognized for tax purposes to an amount exceeding the loss incurred economically. Such limitations include limitations on the deductibility of investment interest, passive activity losses, and amounts in excess of the amount the taxpayer has at risk with respect to an activity. Under present law, these limitations either do not apply to C corporations or apply only to C corporations that are personal service corporations or closely held corporations (essentially defined as corporations more than 50 percent of the stock of which is held by or for five or fewer individuals).

By eliminating or reducing substantially the tax disadvantages of incorporation, distribution-related integration may encourage the use of corporations to avoid these rules. Because distribution-related integration removes the double tax on distributed corporate earnings, taxpayers may view corporations as attractive vehicles for engaging in activities designed to accelerate or increase tax losses. For example, individuals might use passive activity losses by contributing a loss-producing passive activity and an income-producing active business to the same corporation. The deferral benefit achieved by this structure would continue until the earnings sheltered by the preference were distributed. Distributed income would be fully taxable to taxable shareholders, although it would be tax-exempt in the hands of exempt shareholders. In addition, the income generated when the preference reverses would be subject to only one level of tax. Thus, it may be appropriate to extend some of or all the loss limitation rules described above to C corporations if, after distribution-related integration is adopted, experience shows that taxpayers are using C corporations to avoid those rules.

19. A dividends received exclusion (DRE) would be as effective as a DRD in preventing multiple taxation of corporate dividends. The two could, however, produce different technical effects increases where Code limits or classifies taxpayers based on receipts or income. For example, dividends are taken into account under IRC § 448(b)(3), which limits the availability of cash method accounting for certain taxpayers with annual gross receipts in excess of \$5 million. See Treas. Reg. § 1.448-1T(f)(2)(iv). By contrast, dividends are excluded under IRC § 263A(b)(2)(B), which limits capitalization of cost requirements for certain taxpayers whose annual gross receipts do not exceed \$10 million. See Treas. Reg. § 1.263A-1T(d)(2)(iv)(B). Regardless of the general approach, however, special adjustments may be provided wherever appropriate. See, e.g., IRC § 170(b)(2)(B) (corporate charitable deductions are limited to 10 percent of taxable income determined without regard to the DRD). During any period of transition to integration, the current law DRD could be increased in stages from 70 percent to 100 percent as the percentage of integration increases. During periods when there is less than 100 percent integration, a 100 percent DRE would be inappropriate and also would require appropriate phase-in.

20. If all dividends were either fully unfranked or completely franked, it would be relatively easy to retain the current 70 or 80 percent DRD. The mechanics would be similar to those discussed in Section 2.B in the context of the dividend exclusion system. Partially franked dividends would create significant complexity, however. To determine its DRD a corporation eligible for only a 70 or 80 percent DRD would have to separate a partially franked dividend into a fully franked portion and a completely unfranked portion.

Example. A corporation that has a zero SCA balance owns 5 percent (by vote and value) of the stock of a second corporation and has no other assets. The second corporation pays a cash dividend of \$166, which carries an imputation credit of \$29.65.

The recipient corporation must convert the partially franked dividend into fully franked and unfranked components. A \$29.65 imputation credit would fully frank a cash dividend of \$66. Thus, the unfranked dividend is \$100 (\$166 – \$66). After taking into account the 70 percent DRD, the corporation must pay tax of \$10.20 on \$30 of income.

Using the formula in Section 11.B, the corporation would add \$38.55 (\$29.65 for the credits received on the franked portion plus \$8.90 with respect to the \$10.20 of tax paid on the unfranked portion) to its SCA. If the corporation then distributed all its remaining cash to shareholders, it would distribute \$155.80 of cash (\$166 – \$10.20) and attach an imputation credit of \$38.55. Assuming a 31 percent shareholder rate, shareholders would pay tax, after claiming imputation credits, of \$21.70 $((\$194.35 \text{ gross dividend} \times .31) - \$38.55)$. This represents shareholder tax at the 31 percent rate on the remaining \$70 of preference income not taxed in the hands of either corporation.

21. The alternative would tax the recipient corporation on the dividend and permit the tax to be offset by any imputation credit attached to the dividend. The imputation credit and any additional corporate taxes paid on the dividend would increase the recipient's SCA. This alternative rule would eliminate tax preferences upon the initial distribution of preference income, whether the distribution was made to a corporate or an individual shareholder.

22. A compensatory tax system might suggest a different result. Once the decision is made to tax distributed preference income to the distributing corporation, the rationale for extending preferences while the distributed income is in corporate solution may not be compelling. See Section 4.D. As noted in the text, however, some countries with compensatory tax systems (notably the United Kingdom) forgo the compensatory tax for certain intercorporate dividends.

23. See H. Rept. No. 426, 99th Cong., 1st Sess. (1985), p. 302; S. Rept. No. 313, 99th Cong., 2nd Sess. (1986), p. 515.

24. If, unlike the prototype recommended here, the SCA were based on tracing taxable income, difficulties with respect to the AMT would arise in determining the amount of tax that has been paid with respect to a particular distribution by a corporation that has paid AMT. However, under the tracking-tax-paid approach, adding minimum taxes to the SCA can be done directly. As indicated in note 26, the amount added to the SCA would be adjusted to reflect the maximum 31 percent rate at the shareholder level. Indeed, the need to allow imputation credits with respect to corporate AMT is an important reason for preferring the tracking-of-taxes-paid approach to a tracing-of-taxable-income approach under the credit limitation system.

25. The corporate AMT also seems appropriate under a compensatory tax. While a compensatory tax would prevent the passthrough of preferences to shareholders, it would not ensure that corporations pay some level of tax on retained income.

Imputation credits attached to a dividend represent tax prepaid at the corporate level and thus should be allowed for purposes of the individual AMT.

Example. A shareholder with a 31 percent marginal rate has \$100 of AMT preference income, a \$100 gross dividend, and a \$31 imputation credit. Her AMTI is thus \$200. She should owe only \$17 in AMT (\$48 of tax less the \$31 imputation credit). Mechanically, this can be accomplished by computing her regular tax for AMT purposes as zero (\$31 of tax less \$31 imputation credit), but allowing the full imputation credit in computing tentative minimum tax. Thus, her tentative minimum tax is \$17 (\$48 – \$31) and her AMT is \$17 (\$17 – 0).

Similarly, we recommend that excludable dividends not be viewed as preference income for individual AMT purposes under the dividend exclusion and CBIT prototypes. See Section 2.E and Section 4.D.

26. Although the AMT rate is 20 percent, compared with the maximum shareholder rate of 31 percent, corporate AMT payments are not added dollar-for-dollar to the SCA but instead, like regular tax, are reduced to reflect the difference between the corporate and shareholder rates. This rule is necessary because corporate AMT payments give rise to an equal AMT credit that offsets regular corporate tax at the 34 percent rate.

Example. A corporation invests \$100 in an asset that will produce \$100 per year for 2 years. As a deferral preference, the corporation is entitled to expense the asset in the first year.

Year	Cash flow	Taxable income	AMT	Regular tax before credit	AMT credit	Tax due	Cummulative SCA
1	100	0	20	n/a	n/a	20	17.44
2	100	100	n/a	34	20	14	29.65

At the end of year two, the corporation has an SCA of \$29.65 and \$66 of retained earnings. The corporation distributes \$66 to shareholders, and no additional tax is due. If the AMT were instead added to the SCA dollar-for-dollar, the corporation would have an SCA of \$32.21 and excess credits of \$2.56.

27. Mechanically, the limitation on additions to the SCA allows distributions by the U.S. corporation out of earnings attributable to dividends from the foreign corporation to be treated in the same manner as distributions out of earnings attributable to preference income from U.S. sources.

28. IRC § 901.

29. Section 2.C discusses a shareholder level exclusion of foreign source income.

30. Continuing to tax income distributed to shareholders but preserving the benefit of preferences for tax-exempt shareholders under a compensatory tax system would require making imputation credits attributable to the compensatory tax fully refundable to tax-exempt shareholders. If policymakers were to choose to tax preference and foreign income as well as nonpreference income received by tax-exempt shareholders, a compensatory tax should be adopted with nonrefundability of credits to tax-exempt shareholders. This result cannot be accomplished under a credit limitation system without a compensatory tax. Such a compensatory tax system might be limited to preference income, but this would require separate tracking of foreign source income, which could continue to be paid free of U.S. tax to tax-exempt entities. Alternatively, if, contrary to the recommendations here, one chooses to tax neither preference nor nonpreference income distributed to tax-exempt shareholders, credits should be made refundable to tax-exempt shareholders; a system of refundable credits could be provided with either a compensatory tax or a credit limitation system. Refundability, however, would cause significant revenue loss.

31. See also Section 6.D for a discussion of an alternative approach under an integrated system that could be designed to maintain the overall level of tax revenues collected on corporate capital supplied by tax-exempt entities and achieve greater neutrality between the tax burden on their debt and equity capital.

32. Assume, for example, that a U.S. corporation with 1,000 shares outstanding of a single class of stock and an SCA balance of \$2,000 makes a distribution of \$10 per share and designates \$2 per share as the applicable imputation credit with respect to each share. One hundred of the corporation's shares are owned by a foreign person subject to U.S. withholding tax at a rate of 15 percent under an applicable tax treaty. The foreign shareholder will be subject to U.S. withholding tax of \$150 on the distribution of \$1,000 (100 shares \times \$10 distribution \times 15 percent withholding tax). The corporation will reduce its SCA by \$2,000, although the foreign shareholder cannot offset the imputation credit against the U.S. withholding tax.

33. Consideration might be given to allowing a shareholder to carryforward unused imputation credits for some period of time, such as 5 years. Such a carryforward would add complexity, but should serve to enable virtually all shareholders subject to original tax rates below 31 percent and those currently in a tax-loss position to use any excess credits.

34. If imputation credits were fully refundable to all taxpayers, corporations and their shareholders would have no tax incentive to develop strategies for directing the credit to particular taxpayers. Because fully refundable credits would be equally valuable to all taxpayers, taxpayers would be indifferent to the form of a distribution, e.g., a \$69 dividend carrying a \$31 credit versus a \$100 dividend carrying \$0 credit or \$100 of interest or other income such as rent or wages. However, in accord with the recommendations of Chapters 6 and 7, this prototype does not permit refunds of credits to tax-exempt or foreign shareholders. Credits thus would be available only to offset tax liability the taxpayer would otherwise owe on the dividends or other income. As a result, certain taxpayers, e.g., tax-exempt and foreign shareholders, would not be indifferent between receiving a dividend carrying a credit and a higher cash dividend distribution because to them the credit would not be the equivalent of cash.

If the alternative tax on investment income, described in Section 6.D, were adopted, imputation credits would be used by tax-exempt entities to reduce or eliminate that tax and the incentives for streaming would be reduced.

35. One difference is that the imputation credit prototype allows low-bracket shareholders to use excess credits to offset tax on other income.

36. New Zealand requires a corporation generally to frank all dividends paid during a year to the same extent even if the dividends relate to different classes of stock. A corporation may change its franking ratio during a year only if an officer of the corporation declares that the change is not "part of an arrangement to obtain a tax advantage" and the corporation notifies the tax authorities of the change.

Australia has adopted several rules to prevent a corporation from underfranking a dividend. These rules require the corporation (1) to take into account all dividends that are paid on the same day, that have been declared but not yet paid, or that the corporation is committed to pay later in the same year (a "committed future dividend"), e.g., dividends on preferred stock, in allocating franking credits to a given dividend, (2) to frank a dividend that was a committed future dividend at the time of payment of an earlier dividend at least to the same extent as the earlier dividend, and (3) to frank a dividend at least to the same extent as any other dividend paid on the same day. These rules, however, do not prevent a corporation from franking an earlier dividend at one rate and franking a later dividend at a lower rate if the corporation is not committed to pay the later dividend or the later dividend is paid in the next year.

Additional anti-abuse rules might be adopted as necessary. See Appendix B for a discussion of anti-streaming rules adopted by certain of our trading partners.

37. The implementation of distribution-related integration may require certain adjustments to the treatment of qualifying reorganizations to reflect the shareholder credit system. One issue is whether the current law treatment of "boot" (money or property other than stock or securities in a corporate party to the reorganization) is appropriate under distribution-related integration. Under current law, a shareholder receiving boot in a reorganization recognizes gain equal to the lesser of the gain realized and the amount of boot received. If the receipt of boot has the effect of a dividend, gain recognized is taxed as a dividend to the extent of the shareholder's ratable share of the corporation's earnings and profits. Dividend equivalency is tested by treating a target shareholder as receiving only stock of the acquiring corporation and the acquiring corporation as then redeeming an amount of the shareholder's stock equal to the amount of boot received.

The current treatment of boot raises problems under distribution-related integration because of the rule that limits the amount of boot that is taxable to the amount of the recipient's realized gain. Under distribution-related integration, this would allow the distribution of preference income to high-basis shareholders without shareholder level tax. It also would allow the distribution of fully-taxed income to high-basis shareholders without a reduction in the SCA, so amounts in the SCA subsequently could be used to frank distributions of preference income. This is similar to the issue created by share repurchases. If policymakers adopt special rules for share repurchases, similar rules may be appropriate for boot. See Chapter 8.

38. Assume, for example, that a corporation has two active businesses, each generating a mix of taxable and preference income. If the corporation could isolate each of the businesses in a separate corporation but leave the entire SCA balance in one corporation, shares of the corporation without any SCA balance could be distributed to tax-exempt shareholders, and shares of the corporation with the SCA balance could be retained by taxable shareholders.

39. In April 1990, Representative Vander Jagt introduced legislation that essentially adopts this approach. H.R. 4457, 101st Cong., 2d. Sess. (1990). The Vander Jagt bill would allow a tax credit to a shareholder or bondholder equal to the "gross-up amount" included in the holder's income. A recipient of a cash dividend or interest payment from a C corporation would include the gross-up amount, as well the cash received, in income. However, the amount of the credit would be limited to a portion of the taxpayer's tax that equals the ratio of his interest and dividend income to his total income. A corporation would be required to attach credits to a payment of interest or dividends representing the same proportion of the corporation's post-1989 taxes as the ratio of the amount of the net dividend or interest payments bears to post-1990 undistributed earnings and profits. No deduction would be allowed for interest or original discount paid or accrued by a C corporation. See also note 1 in Chapter 4.

The ALI Reporter's recent integration memoranda also adopt such an approach. See American Law Institute, Reporter's Memorandum No. 3 (1991).

40. A bondholder credit system could be adopted either while retaining the current deduction for interest paid by corporations or in a system denying deductions for either interest or dividends at the corporate level. Retaining the deductibility of interest would require imposing a withholding tax on interest payments and allowing recipients a credit for such withholding. The following example shows the calculation of the imputation credit with and without an interest deduction.

Example. For simplicity, this example assumes that the corporate rate is 31 percent. A corporation earns \$100 of taxable income and agrees to pay \$50 of after-tax interest. If no interest deduction is allowed, the corporation would pay tax of \$31 and would add \$31 to its taxes paid account. The taxes paid account would represent available imputation credits for both interest and dividends. The corporation could attach an imputation credit of up to \$22.46 to the interest payment. The \$8.54 remaining in its taxes paid account would fully frank its remaining after-tax earnings of \$19.

If an interest deduction is allowed but a withholding tax on interest is imposed, the corporation would have to pay gross interest of \$72.46. Net of the 31 percent withholding tax (\$22.46), the interest payment would be \$50. Taking into account the \$72.46 interest deduction, the corporation would have taxable income of \$27.54 and would owe tax of \$8.54. Thus, the total tax paid would be \$31 ($\$22.46 + \8.54). The corporation's SCA balance, which would be available only to frank dividend payments, would be sufficient to frank a dividend of its remaining after-tax earnings of \$19.

41. Therefore, CBIT might be viewed, to some extent, as substituting taxation of the payor for taxation of the recipients. To illustrate the concept of substitute taxation, assume a manufacturer borrows \$100 for one year and agrees to pay \$10 of interest to the lender. Assume both the manufacturer and the lender have a 31 percent marginal tax rate. The manufacturer plans to use the \$100 to produce a product that will provide a return sufficient to pay \$110 to the lender at the end of the year. At the end of the year, the manufacturer sells the product for \$115. Under current law, the manufacturer's taxable income is derived by deducting from its \$115 of gross sales \$100 for wages, materials, and other costs of producing the product, and \$10 for interest expense. The manufacturer would be liable for tax of \$1.55 ($\$5 \times .31$), and would use the remaining \$113.45 ($\$115 - \1.55) to repay the \$100 principal on the loan and the \$10 interest, leaving an after-tax return of \$3.45. The lender would pay \$3.10 of tax on its interest income ($\$10 \times .31$) and would receive an after-tax return of \$6.90.

Under CBIT, the lender need only be paid \$6.90 in interest. The manufacturer's taxable income would be determined by deducting from gross sales the \$100 for wages, materials, and other production costs. Thus, the manufacturer would have taxable income of \$15 ($\$115 - \100) and would pay \$4.65 of tax ($\$15 \times .31$). The manufacturer would then use the \$110.35 in after-tax gross receipts ($\$115 - \4.65) to pay \$100 in principal on the loan and \$6.90 in interest to the lender. The lender would not include the \$6.90 of interest it received in its taxable income, because the tax on that income was by the manufacturer. The manufacturer's after-tax return would be \$3.45 ($\$110.35 - \106.90), and the lender's after-tax return would be \$6.90. Compared to current law, the manufacturer's \$4.65 CBIT liability can be viewed as including the same \$1.55 of income tax on the manufacturer, and an additional tax of \$3.10 on the lender's interest income; CBIT substitutes an additional \$3.10 of tax on the borrower for the income tax that current law would impose on the lender.

42. The fact that the imputation credit system taxes income at the shareholder's or lender's rate creates other differences between the two models. For example, no small business exception would be needed. The bondholder credit system, like an imputation credit system, also provides greater flexibility to change policy recommendations in the future. For example, relief could be provided to tax-exempt and foreign investors simply by permitting full or partial refunds of imputation credits. Compare Section 4.F. As with the imputation credit system, however, this flexibility is earned at the cost of substantial complexity.

43. It may be appropriate to retain the withholding tax for unfranked dividends and interest payments. The issue is the same as the treatment of taxable dividends and interest payments if no compensatory tax is imposed under CBIT. See Section 4.E.

44. **Example.** A corporation earns \$100 of taxable income, pays tax of \$34, and adds \$29.65 to its SCA. See Section 11.B for a discussion of how the SCA balance is calculated. The corporation could elect to pay deemed dividends of up to \$66 ($(\$29.65 / .31 - \$29.65) = \66). If the corporation declared a deemed dividend of \$66, shareholders would include \$95.65 in income and would be entitled to imputation credits of \$29.65. Share basis would increase by \$66.

45. Excess credits could be used to offset other tax liability, but would not be refundable, as with imputation credits attached to a cash dividend.

46. See Section 9.A for a discussion of the allocation of basis among shares.

47. The prototype also adopts a holding period requirement and extends certain other rules of current law. See Section 11.F. Those rules would apply to deemed dividends as well as to cash dividends.

48. The rule described in the text would not prevent a corporation from adopting a dividend policy under which it pays unfranked cash dividends. It would, however, prevent a corporation from both paying partially franked or unfranked dividends and using the elective DRIP. Neither of the two common reasons that might lead a corporation to pay partially franked or unfranked dividends arise in circumstances in which a DRIP would be useful. First, a corporation might want to distribute cash but have an insufficient SCA balance to frank all dividends fully. In that case, however, the SCA balance will be completely exhausted by the cash distributions, and the corporation will neither need nor be able to use the DRIP. Second, the corporation might want to retain an SCA balance to frank future distributions. If the corporation intends to retain an SCA balance for future use, however, it would not use the DRIP to reduce its SCA balance.

Chapter 12

1. See Treasury 1, Vol 2, pp. 136-37, 140; and The President's 1985 Proposals, pp. 122-26. A partial or full deduction for dividends paid is often expressed in terms of a split rate system, in which distributed earnings face a lower tax rate than retained earnings. With a full dividend deduction, a split rate system results in a zero corporate tax rate for distributed earnings. With partial dividend deductibility, the effective rate of deduction is $(t_c - t_d)/t_c$, where t_c and t_d are, respectively, the tax rate on retained earnings (the corporate rate) and distributed earnings.

2. Although a dividend deduction could avoid extending integration benefits to tax-exempt and foreign shareholders by imposing non-refundable, corporate level withholding, such a system replicates the imputation credit discussed in Chapter 11. For example, the imputation credit prototype could be duplicated by withholding at a 34 percent rate and allowing credits at a 31 percent rate. The two systems may have different nontax consequences. See American Law Institute, Reporter's Memorandum No. 1 (1990), pp. 45-47.

3. See Section 13.H.

4. Compare Institute for Fiscal Studies (1991) and the Reporter's Study Draft proposals discussed in Sections 12.B and 12.C, which avoid this problem by imputing a deduction on equity capital rather than tracking actual dividend payments.

5. See Section 2.B. This account would restrict the dividends paid deduction to the amount of income that otherwise would have been taxed fully at the corporate level. For example, if a corporation paid tax of \$34 under current law it should be allowed a dividend deduction of up to \$100—the pre-tax earnings, not the after-tax amount of \$66 added to the EDA. The difference occurs because the dividend deduction system operates on a pre-tax basis whereas the dividend exclusion system operates on an after-tax basis. Presumably, the corporate AMT be retained and the interaction between dividend deductions available for regular tax purposes and for AMT purposes would have to be addressed.

6. The following examples illustrate how such results would occur, absent a limitation mechanism similar to the EDA.

Example 1. A corporation earns \$100 of tax-exempt bond interest income in one year. The corporation has no additional earnings in the next year and distributes the \$100 of exempt income it earned in the first year. The corporation has a dividend deduction of \$100, creating a net operating loss that can be carried forward to shelter \$100 of future retained taxable income from tax.

Example 2. A corporation earns \$100 of foreign source income and pays foreign taxes of \$34 in one year. After the foreign tax credit, it pays no U.S. tax. In the second year, the corporation has no additional earnings but distributes \$66. The corporation has a dividend deduction of \$66, which creates a \$66 net operating loss that can be carried forward to shelter \$66 of future taxable earnings.

7. An alternative approach, suggested in The President's 1985 Proposals, would require the distributing corporation to report to shareholders the portion of the dividend deducted. The deducted portion would be fully taxable to the corporate shareholder. The nondeducted portion would be eligible for a 100 percent dividends received deduction. Thus a corporate shareholder would be entitled to a 100 percent dividend received deduction with respect to dividends received in excess of the distributing corporation's previously taxed earnings. This approach would preserve preferences until distributed out of corporate solution.

8. See Chapter 9, note 2.

9. See Institute for Fiscal Studies (1991) and the description in Gammie (1991).

10. While the proposal would reduce tax-induced distortions in corporate financing decisions, if capital gains from retained earnings were to receive very favorable tax treatment at the investor level the IFS proposal would tend to encourage retention.

11. Shareholders funds are defined as:

- (1) shareholders' funds for the previous period, plus
- (2) any new equity contributed, plus
- (3) the AFCE allowance for the previous period, plus
- (4) the taxable profits for the previous period, less
- (5) the tax paid on those profits, less
- (6) dividends and distributions to shareholders and capital repaid.

A new corporation would have shareholders' funds for the initial period equal to the value of the equity capital contributed by shareholders. Additional rules would be needed to determine an existing corporation's shareholders' funds on the date of introduction of AFCE.

12. The following example illustrates the difference between intercorporate equity and debt investments under the proposal. If Corporation A uses \$100 raised from new equity to buy shares in Corporation B, shareholders' funds are \$0 for A and \$100 for B. If, on the other hand, A raised \$70 from equity and \$30 from debt to buy shares in B, A would have shareholders' funds of -\$30. The negative AFCE allowance would reduce the interest deductible on the \$30 of debt against A's profits.

13. See American Law Institute, Reporter's Study Draft (1989).

14. According to the Reporter's Study Draft new equity capital includes "all amounts paid in for stock or as shareholder contributions to capital after the date of this proposal." The critical distinction is between "accumulated" and "contributed" equity. Earnings on new "contributed" capital become "accumulated" capital, do not increase the QCC, and, therefore, do not qualify for a dividend deduction. The intent is to treat contributed equity capital in a manner consistent with new borrowing. That is, if the allowable rate for deduction were 7 percent, an increase in contributed equity of \$1 million would generate \$70,000 in dividend deductions. Earnings on the \$1 million invested would not qualify for a dividend deduction.

15. An important difference between the IFS and Reporter's Study Draft proposals is that the former grants dividend relief to both accumulated and new equity, while the latter grants relief only to new equity. The Reporter's Study Draft distinguishes between accumulated and contributed equity. An allowable dividend deduction is computed as the product of new contributed equity and the allowable rate.

16. As a consequence, low-bracket investors would be subject to a lower tax burden on dividends than on nondividend distributions.

17. The four Reporter's Study Draft proposals include coordinating rules to ensure that any particular transaction is subject to no more than one of these rules. For example, the MTD is imposed only to the extent that a distribution does not trigger interest disallowance or a reduction in the capital base for the dividends paid deduction. The MTD also does not apply to the purchase of stock as a portfolio investment. A distribution does not trigger interest disallowance to the extent that it reduces the capital base for the dividends paid deduction.

18. See Chapter 10 and Section 13.B.

PART V

Chapter 13

1. See, e.g., Shoven and Whalley (1972), Shoven (1976), Ballard, Fullerton, Shoven, and Whalley (1985), and Fullerton, Henderson, and Mackie (1987).

2. See Gravelle and Kotlikoff (1989).

3. Whether these distortions in fact create significant efficiency costs depends on the response of business enterprises to the tax bias against incorporation. Gordon and MacKie-Mason (1991), analyzing data on individual business enterprises, find that changes in organizational form (between C and S corporations, and between S corporations, partnerships, and proprietorships) are sensitive to changes in tax rates and other tax policy incentives.
4. For example, some potential investments that benefit from corporate organization on account of liquidity of corporate securities or access to capital markets will not be undertaken even if they earn more (before taxes) than comparable investments in the noncorporate sector. Publicly traded partnerships, including master limited partnerships with units traded on organized exchanges, can have the liquidity of publicly traded corporations without the corporate taxes if they limit their investments to certain types of activities, principally real estate and natural resources. REITs, REMICs, and RICs avoid a second level of tax provided they satisfy certain restrictions on assets and business activities. Alternatively, businesses may elect S corporation status. This allows them to retain some of the benefits of incorporation, but at the expense of conforming to certain restrictions. For example, S corporations have limitations on the number of investors they can have and the type of stock they can issue. See IRC § 1361(b).
5. In addition to corporate domestic income as a percentage of net national product, mentioned earlier, Figure 13.2 shows gross domestic product of all corporations and nonfinancial corporations, relative to gross domestic product; and gross domestic product of nonfinancial corporations relative to GNP, from 1950 to 1990.
6. Compare the declines in 1989 and 1990 in corporate profits relative to net national product (Figure 13.1) and in total income in the corporate sector relative to net national product, gross domestic product and gross national product (Figure 13.2) with the stability in income of proprietorships and partnerships relative to net national product (Figure 13.1).
7. S corporation income here is measured consistent with pre-1987 figures.
8. In the Midsession Review of the Budget (1990), estimated corporate receipts were decreased by approximately \$7.5 billion to reflect revisions of the 1986 Act's effect on corporate income taxes and the greater than anticipated use of Subchapter S filings by corporations.
9. A bias would remain, however, if business tax preferences and losses that reduce the effective tax rate on noncorporate income did not pass through corporations to their shareholders.
10. A common rule of thumb is that the accrual-equivalent tax rate on capital gains is about one-fourth the statutory rate. See Poterba, "Tax policy and corporate saving" (1987) and the references therein. This adjustment captures reductions attributable to deferral and to the fact that the basis of inherited property is stepped up to fair market value (eliminating the tax on capital gains accrued before the holder's death).
11. For example, in the late 1970s, marginal tax rates on individuals were as high as 70 percent for unearned income, while the top marginal rate on corporate income was 46 percent and there was a 60 percent exclusion for long-term capital gains. This created an incentive in some cases to shift income into corporations, because the combination of the corporate tax rate and the effective capital gains rate was lower than the individual tax rate on the same amount of income. See Feldstein and Slemrod (1978). This was particularly likely to be true for corporations with income low enough to take advantage of the graduated corporate rate structure.
12. In comparing corporate and noncorporate investments, however, the degree of bias may be reduced by the existence of accelerated depreciation allowances. The relative importance of those allowances depends upon the marginal business level tax rate facing the corporate or noncorporate enterprise. In the case of the debt-equity choice, the focus is on a corporation contemplating the best method to finance that portion of net investment that is not being funded by the government through a policy of accelerated writeoffs. The existence of accelerated allowances is immaterial to that choice.
13. In certain special cases, however, debt may not enjoy a tax advantage over equity. Consider, for example, a corporation whose tax liability is determined under the AMT. That corporation faces a 20 percent corporate income tax rate. Thus, if the accrual-equivalent capital gains rate were sufficiently low relative to the shareholder tax rate on interest income, equity might be the tax preferred form of financing for the minimum tax corporation.

Because statutory corporate tax rates are graduated, a corporation with taxable income under \$75,000 also would face a relative low (15 to 25 percent) corporate tax rate. For such a corporation, equity is less tax-disadvantaged than for corporations with larger profits that face the 34 percent statutory tax rate. In addition, a corporation with a substantial net operating loss can be thought of as having a low corporate tax rate and, therefore, as deriving little benefit from debt as opposed to equity financing.

14. The idea that debt can improve managerial incentives is at the core of Jensen's (1986) "free cash flow" theory, a prominent explanation of the increase in debt financing. Jensen contends that managers, if given the leeway, will take advantage of the inability of suppliers of funds to ascertain whether the firm is investing efficiently. Managers may squander cash flow by investing for their own benefit in projects with negative present value. An arrangement in which outside lenders hold debt and managers hold the residual claims minimizes this misuse of cash flow. Higher productivity (and, hence, shareholder profitability) could result from better managerial incentives. Some studies providing empirical evidence in support of this proposition are reviewed in Bernanke (1989).

This theory is subject to challenge, however. While debt financing is one way to mitigate the problem Jensen describes, it may not be the best option. If the objective is to make managers bear more residual risk, other means could be used (including incentive-based management compensation or reform of the oversight role, which in principle is exercised by boards of directors). Tax considerations have likely played a role. If taxes have contributed to increased debt, then high debt levels may not be the most efficient way to operate the firm.

15. This is true to the extent that debt is costly to renegotiate. See Gertler and Hubbard (1990). The idea is that managers should be made residual claimants only on the component of profits they can influence: the firm specific component. For example, managers should not be punished if the business does poorly during a recession but no worse on average than its competitors.

16. See Warshawsky (1991).

17. Looking at changes in debt to asset ratios in the "upper tail" (the ninetieth percentile corporations) reveals that some firms are close to having negative net worth on a market-value basis.

18. See Bernanke and Campbell (1988), Bernanke, Campbell, and Whited (1990), and Warshawsky (1991).

19. The empirical evidence on the effect of taxes on corporate borrowing decisions is mixed. Studies by Ang and Peterson (1986), Long and Malitz (1985), Bradley, Jarrell, and Kim (1984), and Marsh (1982), for example, fail to find plausible or significant tax effects. Other studies, in contrast, find significant relationships between tax policy variables and corporate borrowing. See, e.g., Auerbach (1985), Bartholdy, Fisher, and Mintz (1985), MacKie-Mason (1990), and Masulis (1983). At least two studies have directly estimated the responsiveness of corporate debt financing to changes in the tax advantage of debt. Nadeau (1988) estimates that a 1 percent increase in the tax advantage of debt relative to equity will cause a 0.2 percent increase in the fraction of external funds obtained by issuing debt. Rangazas and Abdullah (1987) estimate that a 1 percent increase in the tax advantage of debt relative to equity will cause a 0.12 percent increase in the debt to value ratio in the short run, and a 0.4 percent increase in the debt to value ratio in the long run.

20. This argument is made formally in Gertler and Hubbard (1991).

21. Some financial economists have maintained that tax parameters are irrelevant for dividend payout decisions, arguing that share prices of dividend paying firms are set by investors who face equivalent (typically zero) tax burdens on dividends and capital gains. See, e.g., Miller and Scholes (1978).

22. See, e.g., Bhattacharya (1979) and Miller and Rock (1985).

23. The new view (sometimes described as the "tax capitalization" or "trapped equity" approach) is developed in King (1977), Auerbach (1979), and Bradford (1981). See also the survey in Poterba and Summers (1985).

24. A temporary change in the dividend tax rate would change both dividend payments and investment incentives because of intertemporal substitution.

25. Again, investment incentives are only affected by transitory changes in investor level dividend tax rates.

26. Under the new view, other tax factors such as the corporate tax rate and capital cost recovery allowances affect the corporation's dividend distributions and the investment policy. To understand why, under the new view, permanent dividend taxes do not affect investment incentives, one must recognize that this view assumes that retained earnings provide the funds for marginal corporate equity financed investment. Consider, for example, a corporation that wants to invest \$1 of capital by retaining an additional dollar of earnings. To retain the dollar, the corporation must reduce dividends by \$1. At a 20 percent marginal individual income tax rate, the \$1 of dividends foregone represents \$0.80 net of the personal level tax on dividends, so \$0.80 represents the cost of the investment in terms of dividends foregone. In the following period, suppose the investment earns a 6.4 percent pre-tax return, leaving \$0.043 to distribute to the shareholders after paying corporate tax

at a 34 percent marginal corporate income tax rate ($0.043 = 0.064 \times (1 - 0.34)$). Upon distribution, the shareholder receives a net dividend of \$0.034, after paying the 20 percent tax on the dividend distribution ($0.034 = 0.043 \times (1 - 0.20)$).

In determining investment incentives, however, it is the return to the shareholder relative to the cost of the investment that is relevant. In our example, the investment costs the shareholder only \$0.80 in terms of foregone dividends, since that is how much she would have had to invest if the \$1 had been distributed to her rather than reinvested within the corporation. Consequently, the rate of return relevant for determining whether the investment should be undertaken is 3.4 percent divided by 80 percent (4.3 percent), the pre-dividend tax return. Because the cost of the investment is always reduced by the dividend tax in exactly the same proportion that the return from the investment is reduced by the dividend tax, the dividend tax does not affect investment decisions under the new view.

The new view does assume, however, that share appreciation on investments financed by retained earnings is subject to capital gains tax. The effective accrual tax rate on capital gains does affect investment incentives, even under the new view. To see why, assume that the effective accrual tax rate on capital gains is 6 percent. When the corporation retains a dollar, the investor owes capital gains tax of $0.06 \cdot q$, where q gives the share appreciation caused by \$1 of retained earnings. We assume that the firm pays dividends, so that q must equal 0.851 ($0.851 = (1 - 0.2)/(1 - 0.06)$) to insure that shareholders are just indifferent between dividends and retained earnings. Thus, the shareholder pays capital gains tax of \$0.051, thereby sacrificing a total of \$0.851 in after-tax income to make the investment of one dollar. In the next year, the investment pays a dividend of \$0.043, of which the investor keeps \$0.034 after paying taxes at a 20 percent rate. To measure the investor's after-tax rate of return, we must adjust for the fact that only \$0.851 was sacrificed rather than \$1. As a result, the investor earns a 4 percent rate of return ($0.04 = 0.034/0.851$) after taxes. Note, however, that since the investment yields 4.3 percent before investor level taxes, the investor level tax rate is simply the 6 percent effective tax rate on capital gains ($0.04 = 0.043 \cdot (1 - 0.06)$). Thus, the capital gains tax, but not the dividend tax, reduces the investor's incentives under the new view.

27. Under the new view, managers are assumed to maximize shareholder value, and corporations can be described as "immature" (with desired investment spending exceeding internal funds) or "mature" (with internal funds exceeding desired investment spending). Immature firms use their available internal funds from retained earnings, then seek more costly external finance. They would never pay dividends and issue new shares at the same time. Investors in mature firms must be indifferent at the margin between receiving a dollar in dividends or receiving a capital gain on the reinvested dollar. If the value of an additional dollar of investment in the firms is denoted by q , the investor must be indifferent between receiving a dividend of \$1—valued at $1 - m$, where m is the investor level tax on dividends—and a capital gain of q dollars—valued at $q(1 - z)$, where z is the investor level accrual-equivalent tax rate on capital gains. Hence, $1 - m = q(1 - z)$, so that $q = (1 - m)/(1 - z) < 1$. Under certain assumptions, q is related to the ratio of the market value of the firm to the replacement cost of the firm's capital stock. Hence, the dividend tax is capitalized in share values (i.e., decreasing m would increase q and the value of the firm).

28. Under the traditional view, dividends offer nontax benefits to shareholders, so that tax-disfavored dividends are not a cheaper source of funds for the firm than external finance. Using the notation of the previous note, $q = 1$, and investor level dividend taxes are not capitalized in share values.

29. See Poterba, "Tax policy and corporate saving" (1987). The Tax Reform Act of 1986 is assumed in the analyses discussed in this chapter to have increased the payout ratio from the 0.61 value reported by Poterba to 0.73 under current law.

30. Statistical analysis is difficult because it is often difficult to isolate changes in tax rates on income from dividends that occur independently of changes in tax rates on nondividend income (which would affect the required return on corporate equity, share values, profits, and dividends in equilibrium).

31. Brittain (1966) analyzes data on U.S. corporations from 1920 through 1960. For the corporate sector as a whole, he finds that in the short run (first year) a 1 percent increase in dividend tax rates would reduce the dividend payout ratio by 0.18 to 0.42 percent. As corporations gradually adjust to the new tax system, they respond more fully, and in the long run the behavioral responses are larger, ranging from 0.61 to 1.02 percent. Brittain concludes that the dividend tax rate explains dividend payout better than any of a variety of measures of the tax penalty on dividends relative to capital gains.

Feldstein (1970) examines the dividend payment behavior of British firms from 1953 through 1964, and finds that payout decisions were sensitive to the tax penalty on dividends relative to capital gains. Feldstein finds that in the short run (first year) a 1 percent increase in the tax penalty on dividends relative to capital gains (measured as the opportunity cost of retentions in terms of foregone dividends) will reduce the dividend payout ratio by between 0.27 percent and 0.68 percent. In the long run, Feldstein's estimates are close to 1.0.

King (1971, 1972) examines data on British corporations from 1949 through 1967. He finds behavioral responses that are lower than Feldstein's by about one-half. However, Feldstein (1972) countered that King's estimates are biased downward because of data problems, and maintains that the true response is closer to his own original estimates than to King's estimates.

Poterba and Summers (1985) also examine data on British firms, using information through 1983. They find that dividends are very sensitive to the tax penalty variable. They estimate that a 1 percent increase in dividend tax rates would reduce dividend payout rates by 0.18 to 0.54 percent in the short run and by 1.03 to 2.6 percent in the long run.

Poterba, "Tax policy and corporate saving" (1987) provides estimates based on data for the United States for the period 1948 through 1986. Poterba estimates short-term responses in the dividend payout ratio with respect to the dividend tax penalty ranging from 0.61 to 0.78 percent. In the long run, Poterba's elasticities range from 1.56 to 4.00 percent.

Another type of evidence comes from studies of changes in asset prices in response to taxes. Such studies attempt to test whether investor level dividend taxes are capitalized in share prices. Poterba and Summers (1985) studied the reaction of prices of British stocks to the announcement in 1970 that an integrated tax system would replace the double taxation of dividends. They found no significant increase in stock prices, suggesting that dividend taxes were not capitalized into share values.

32. This estimated sensitivity, in principle, could reflect investors' perceptions that dividend tax changes are temporary. Even in the new view, a temporary decrease in dividend tax rates would increase dividend payout. Poterba and Summers (1985) argue, however, that empirical evidence is consistent with an effect on payout of "permanent" dividend tax changes.

33. See Shoven (1987) and Poterba, "Tax policy and corporate saving" (1987).

34. The calculations follow Poterba (1987), and are based on tabulations of the COMPUSTAT Industrial and Research files.

35. In different contexts, see Lintner (1956), Easterbrook (1984), Jensen (1986), Gertler and Hubbard (1991).

36. See the discussion in Fazzari, Hubbard, and Petersen (1988) and Hubbard (1990).

37. Empirical evidence in support of the proposition that capital income taxes affect investment is more conclusive than for the case of saving. Modern theoretical models of business fixed investment build on early work by Jorgenson (1963), which demonstrated a link between capital spending and the cost of capital, which in turn depends in part on tax rates. Initial empirical evidence by Hall and Jorgenson (1967) bolstered this view. Criticism of the Hall-Jorgenson approach by Eisner and Nadiri (1968) and Eisner (1969) (see also later work by Chirinko and Eisner, 1983) centered on the Hall-Jorgenson approach of combining output and cost of capital effects in a single term. In this work by Eisner and others, the cost of capital effect in isolation was small. A significant effect of taxes on investment spending has been demonstrated in recent models using a range of underlying theoretical approaches. See, for example, Summers (1981), Feldstein (1982), Feldstein and Jun (1987), Fazzari, Hubbard, and Petersen (1988), and Auerbach and Hassett (1990, 1991).

38. See Shoven and Whalley (1984) for a discussion of computable general equilibrium models.

39. The assumptions underlying the models were made to conform to each other whenever possible. Common assumptions include inflation rates (3.5 percent), asset holding periods (seven years), share of capital gains excluded from tax through step up in basis at death (two-thirds), historical dividend-payout ratios (two-thirds of the real return), and historical debt shares (40 percent for corporations, 34 percent for noncorporate enterprises, and 38 percent for owner occupied housing). Each model generally characterizes the production technologies in a particular industry in a similar way, and where possible the models assume consistent behavioral responses of dividend-payout ratios and debt to equity ratios to changes in taxes. Only Federal taxes on capital income are taken into account in measuring investment incentives.

40. By taxing distributions out of tax-favored or foreign-taxed income, a compensatory tax can significantly offset the efficiency gains otherwise resulting from integration. In particular, had a compensatory tax been incorporated into the CBIT prototype (rather than the investor level tax actually recommended), the decision to retain, rather than distribute, current earnings would be as distorted by tax considerations as under current law.

41. The analysis of corporate borrowing in the model is based on Nadeau (1988). He estimates an elasticity of the fraction of total external financing in the form of debt to the difference between the real rate of return required on equity and the real interest rate of 0.224. The representation of corporate borrowing in the model is consistent with an elasticity of the debt

to asset ratio with respect to the tax advantage of debt of 0.3. Nadeau measures the tax advantage of debt as $1 - [(1 - t_d)(1 - t_e)/(1 - t_c)]$, where t_d is the tax rate on debtholders, t_c is the corporate tax rate, and t_e is the effective tax rate on the real return to equity (including the benefit from the preferential treatment of capital gains). Rangazas and Abdullah (1987) have estimated that this elasticity is about 0.4 in the long run, somewhat larger than the behavioral response assumed in the model used in this Report.

42. The gain to shareholders from a dollar distributed as a dividend relative to an additional dollar of retained earnings is given by $(1 - m)/(1 - z)$, where m is the tax rate on dividends and z is the accrual-equivalent tax rate on capital gains. The model assumes an elasticity of the dividend payout ratio with respect to this measure of relative after-tax values of approximately unity. This estimate is conservative. For example, Poterba (1987) estimated the long-run elasticity to be in the range from 1.6 to 4.0, while Feldstein (1970) estimated long-run elasticities ranging from 0.85 to 1.33.

43. In all calculations, noncorporate business is assumed to be financed using 34 percent debt, and owner-occupied housing using 38 percent debt. These calculations are based on information from Balance Sheets for the U.S. Economy, Board of Governors of the Federal Reserve System, various issues.

44. In fact, because nominal interest payments are deductible, the effective marginal tax rate on debt-financed investments is negative in these calculations.

45. These calculations assume that retentions are never distributed. Thus, they may overstate the difference between the taxation of dividends and retentions. This assumption is probably appropriate for the calculations below, however, since incentive effects in these calculations are based on a marginal expansion of the capital stock. Retained earnings used to finance such an expansion would be retained indefinitely.

46. In the scaled-tax-rate calculations, and compared to current law, all prototypes reduce slightly the overall average cost of capital for the economy, and encourage additional savings and investment. The small reduction in the overall average cost of capital is caused by the reduction in the premium that corporate investments must earn to compensate investors for tax-induced corporate financial distortions. The direct tax cost of investment has, by assumption, remained fixed at its current law level. Since CBIT reduces financial distortions most significantly, it generates the largest reduction in the overall average cost of capital. This effect is not the focus of the present analysis, however.

47. The incidence of the corporate income tax is discussed in detail in Section 13.G.

48. Mackie (1991) describes the technical details of the model outlined in this section. The model is based upon Fullerton and Henderson (1989).

49. See, e.g., Gordon and Malkiel (1981), Fullerton and Gordon (1983), and Gertler and Hubbard (1990).

50. Even though in the scaled-tax-rate calculations the integration prototypes may leave constant the effective tax rate on investment, they still might encourage capital formation by reducing tax-induced distortions in corporate financial policy. Although small in an absolute sense, this effect may be large relative to the other gains brought on by the integration prototypes. Nonetheless, the static, single period calculations reported in the tables do not incorporate such an effect.

51. We use a modified version of the Mutual Production Model introduced by Gravelle and Kotlikoff (1989).

52. Corporate financial behavior in the MPM is based on CES functional forms with an elasticity of dividend payout ratio with respect to the tax penalty on dividends relative to capital gains equal to -3.0, and an elasticity of the leverage ratio with respect to the tax advantage of debt relative to equity equal to 0.3. Thus, the financial behavior in the MPM is consistent with, but not identical to, that assumed in the augmented Harberger model described earlier. For technical details of the MPM, see Gravelle (1991).

53. As statutory tax rates rise to make the distribution-related prototype revenue neutral, the tax advantage of debt relative to equity also rises because the higher tax rates increase (1) the value of deducting nominal interest, and (2) the tax rate on purely inflationary capital gains. At the set of tax rates needed for revenue neutrality, these two effects, combined with a relatively large distortion in dividend policy, are sufficient to counteract the effect of the dividend exclusion or credit. As a result, relative to current law the tax benefit to debt rises, and corporations actually increase slightly their use of debt.

54. The portfolio allocation model is described in Galper, Lucke, and Toder (1988).

55. Households hold debt and corporate equity, directly and indirectly, through certain pension holdings. The household allocations of debt and corporate equity in Table 13.9 reflect direct holdings. Pension holdings of debt and corporate equity are shown separately.

56. Household wealth includes small net holdings of foreign equity. As a result, total wealth slightly exceeds the value of total physical capital, so shares can differ between the top and middle panels of Table 13.9.

57. Though not shown, the PA model also simulates changes in portfolio shares across income groups. The shareholder allocation, imputation credit, and CBIT prototypes shift stock ownership from high-income to low-income groups; the dividend exclusion prototype shifts stock holdings to higher-income groups. In all cases, the shifts are quantitatively small. Larger cross-household shifts in taxable debt accompany the prototypes, especially CBIT. Broadly speaking, all of the prototypes reduce the share of total debt held by low-income groups, while raising the share held by middle- and high-income groups.

58. Note that this can result simply because existing businesses in the noncorporate sector decide to incorporate. It does not necessarily imply a change in ownership of assets.

59. Both the augmented Harberger model (AH) and MPM simulations suggest that each integration prototype would improve economic welfare. The models also suggest possible gains at both real and financial margins. Nonetheless, there are substantial differences between these two models' results. Perhaps most noticeably, the MPM produces much larger shifts in physical capital and in economic welfare than does the AH model. There are some key differences in the models' predictions about corporate financial policy, real capital shifts, and welfare changes, as described below.

Changes in corporate financial policy. For a given prototype and financing mechanism, the two models predict very similar changes in the corporate dividend payout ratio. In the lump-sum calculations, furthermore, the two models predict fairly similar changes in the corporate leverage ratio. In contrast, with the scaled-tax-rate replacement mechanism, the two models predict somewhat different changes in the corporate leverage ratio, especially under the two distribution-related prototypes. Such differences can be traced to the fact that the two models (1) start with somewhat different statutory rates, (2) use slightly different behavioral responses in estimating corporate financial behavior, and (iii) have different equal-tax-yield requirements.

Changes in capital allocation. The MPM generally produces larger shifts in physical capital than does the AH model. This difference reflects in part the MPMs greater scope for substitutability between corporate and noncorporate resources. The greater substitutability stems from two sources: (1) a much larger implied substitution elasticity between corporate and noncorporate business in each industry; and (2) a corporate-noncorporate choice in the provision of rental housing that is not considered in the AH model.

Changes in welfare from improved consumption. The MPM predicts larger gains from improved consumption choices. This difference is due principally to the MPM's greater shifts in capital (and other resources) discussed above. The greater substitution between the corporate and noncorporate form in the MPM means that, because investors are quite sensitive to tax differences, current law does more to distort the allocation of real resources in that model than in the AH model. Consequently, relieving the tax distortion produces a larger gain in the MPM than in the AH model.

Changes in welfare from corporate financial policy. The MPM generally produces larger changes in welfare from changes in corporate debt and dividend policy. Some differences between the models' welfare results reflect differences in the predicted changes in the leverage and dividend payout ratios, as discussed above. In addition, for each prototype the MPM has a larger fraction of the economy's stock of capital allocated to the corporate sector under current law than does the AH model. Thus, the same per unit financial distortion would produce a larger absolute (i.e., dollar) loss in the MPM than in the AH model.

60. Our gains also are on the same order of magnitude as those estimated for the 1986 Act. See, e.g., Fullerton, Henderson, and Mackie (1987).

61. See Harberger (1966), Shoven (1976), and Fullerton, et al. (1981).

62. See Fullerton (1984).

63. See Fullerton and Henderson (1989).

64. Others also have emphasized the role of debt finance and capital gains taxes in reducing the size of the corporate tax wedge, and so reducing the efficiency cost of the corporate tax system. See, e.g., Gordon and Malkiel (1981) and Stiglitz (1973).

65. The important differences are three. First, in this Report, only Federal income taxes distort investment decisions, while in Fullerton and Henderson, state and local income and property taxes also act to distort investment decisions. (All other things constant, this would tend to make the welfare gains from integration in Fullerton and Henderson larger than those in this Report.) Second, Fullerton and Henderson's calculations are based on the new view of dividend taxes while this Report uses the traditional view. (All else constant, this would tend to make the welfare gains from integration in Fullerton and Henderson smaller than those in this Report.) Finally, in this Report the model has been augmented to account for tax-induced financial distortions. (This would tend to make the welfare gains from integration, even those due to real resource allocation alone, smaller in Fullerton and Henderson than those in this Report.)

66. Fullerton and Gordon (1983), for example, estimate that eliminating the tax incentive for corporate debt would generate gains equivalent to about 0.8 percent of consumption, while Gordon and Malkiel (1981) estimate that it would generate gains of about 0.4 percent consumption.

67. Neither Gravelle (1989) nor Fullerton, Henderson and Mackie (1987) considered the welfare costs of distortions of corporate financial decisions.

68. Harberger (1977 and 1980) argues that evidence on rates of return on capital is consistent with capital mobility. On the other hand, Feldstein and Horioka (1980) found that domestic saving and investment rates moved too closely together in the 1960s and 1970s to be consistent with capital mobility. Feldstein and Horioka reasoned that if capital were perfectly mobile internationally, national savings rates should be independent of national investment rates. Capital would flow to wherever it received the highest return, and so returns would be equalized globally. Therefore, if saving increased in a country, rather than reducing interest rates below the global interest rate and thereby increasing investment at home, the additional saving would flow abroad. However, examining data from OECD countries, they found that, over long periods, national saving and investment rates were highly correlated. In a regression of national investment rates on national saving rates, the estimated coefficient on saving was statistically significant and close to unity. They interpreted this to mean there was very little international capital mobility, so that a one dollar increment to national saving produced almost a one dollar increment to national investment.

Since Feldstein and Horioka, there has been a series of papers examining the saving-investment relationship in time series and cross-section studies, generally with the intent of overturning their result. The result has, however, until recently, held up remarkably well for data from many countries over a long period. Recently, however, studies by Feldstein and Bacchetta (1989) and Frankel (1990) indicate that the close correlation between saving and investment may have broken down during the 1980s. Using data from the OECD countries, Feldstein and Bacchetta found that the coefficient on saving in a saving-investment regression is markedly lower for the 1980-1986 period than for prior years. Frankel used a long time series of U.S. data and found that the relationship between saving and investment held up well before 1980, but for the 1980-1987 period the estimated coefficient on saving is relatively small and statistically insignificant.

Several authors have pointed out that national savings and investment rates are both endogenous variables. Hence if there are exogenous variables that are correlated with both saving and investment, one could find a significant correlation between the two even in the presence of perfect capital mobility. See, e.g., Obstfeld (1986), Summers (1986), and Frankel (1986). Feldstein and Bacchetta (1989) rejected most of these explanations.

More recently, researchers have studied impacts of domestic capital market imperfections on capital flows. For example, Gertler and Rogoff (1990) present a model in which capital is perfectly mobile internationally, but capital market imperfections can lead domestic saving to be correlated with domestic physical investment. In their model, there is a domestic sector consisting of risky projects. There also is an international market for a riskless asset which yields a world rate of return. Foreigners can invest funds directly in the risky domestic projects, but because of asymmetric information they do not know how much of their funds are actually used in the project and how much reinvested in the international capital market. The probability of the project's success depends on how much money is actually invested in it. There is underinvestment of foreign funds in the risky domestic sector, but foreign investment increases with increased domestic investment in the risky sector. If saving increases, thereby increasing investment of domestic funds in the risky sector, foreigners will be willing to contribute more funds too. This may cause saving and investment to be correlated. While this model is stylized, it does point out that international mobility of capital in one market (for low-risk assets) need not imply that returns are equated internationally in markets for risky assets.

69. Most of the empirical evidence pertains to debt securities. When looking at securities (as opposed to saving and investment rates), the appropriate test is whether returns are equalized across national boundaries. To implement this test, one needs to define (and measure) the relevant returns that should be equalized. This is not always easy.

Mishkin, "Are Real Interest Rates Equal Across Countries" (1984), Mishkin, "The Real Interest Rate" (1984), and Mark (1985) found evidence against real interest parity. In a less direct test, Barro and Sala-i-Martin (1990) estimated a system of country real interest rate and investment equations derived from a macroeconomic model. They found some evidence that global factors, e.g., global stock returns, are more important in determining a country's real interest rate than country specific factors. Of course, real interest parity may not hold even in the presence of perfect capital mobility if there is an expected change in the real exchange rate or an exchange rate risk premium. A test for capital mobility that allows for the existence of expected changes in the exchange rate or exchange rate risk premia is whether covered interest parity holds. Frankel and MacArthur (1988) and Frankel (1990) present evidence that covered interest differentials have narrowed over time, and that they are currently small for major industrial countries.

The covered interest differential measures only the extent of institutional barriers and market imperfections that impede capital flows. It does not measure the substitutability of domestic and foreign assets in investors' portfolios. The uncovered interest differential is a better indicator of capital mobility capturing asset substitutability. The difference between the uncovered interest differential and the covered interest differential is the exchange rate risk premium, the size of which provides a measure of the substitutability of assets across currencies. Froot and Frankel (1989), Giovannini and Jorion (1987), and others have rejected uncovered interest parity, suggesting the presence of a risk premium. Frankel (1990) presents some evidence that much of these differences is accounted for by expected changes in real exchange rates rather than exchange rate risk premia.

To summarize, there appears to be substantial integration in asset markets for short-term debt. Of course, even if there is a high degree of capital mobility in these markets, imperfect substitution between these markets and other asset markets (for equity or long-term debt) could still be consistent with weak overall integration of capital markets.

Tests of equity market integration in the capital asset pricing model have generally rejected international integration. See, e.g., Stehle (1977) and Jorion and Schwartz (1986). This may be due in part to the sample period (which does not include much of the 1980s). French and Poterba (1991) stress informational problems as an explanation for imperfect international diversification in equity markets.

70. See Mutti and Grubert (1985) for details.

71. The model assumes not only that debt capital is more internationally mobile than equity capital, but also that debt is more important in cross-holdings of assets. In the model's calibration, 66 percent of foreign holdings of U.S. assets are in the form of debt, while 60 percent of U.S. holdings abroad are in the form of debt.

72. This is true even for shareholders that are tax-exempt institutions. Taxes borne by pension and life insurance funds reduce the incomes of their beneficiaries, and taxes falling on charitable and educational institutions reduce the services they can provide.

73. See, e.g., Harberger (1962), Shoven and Whalley (1972), Shoven (1976), Pechman (1987), and Gravelle and Kotlikoff (1989).

74. See Harberger (1962).

75. See Ebrill and Hartman (1982) and Gravelle and Kotlikoff (1989).

76. See, e.g., Stiglitz (1973). The risk of bankruptcy may constrain the use of debt to finance the marginal investment, and that risk plays an independent role in the effect of the corporate tax. See, e.g., Gordon and Malkiel (1981).

77. See, e.g., Harberger (1983), Mutti and Grubert (1985), and Pechman (1987).

78. See Young (1988), Murthy (1989), and Gravelle (1991).

79. This possibility seems likely for the United States since the corporate tax is not a residence-based tax. American multinationals pay taxes on repatriated income to the United States in excess of foreign taxes paid. The U.S. corporate tax, in fact, is both residence-based and source-based, since taxes on earnings retained and reinvested abroad can be deferred.

80. Other assumptions have sometimes been used by other analysts. While Pechman (1987) allocated the corporate income tax to all capital income, Pechman and Okner (1974) and Pechman (1985) used five different assumptions to allocate the corporate income tax: (1) to dividends, (2) to property income in general, (3) half to dividends and half to property income in general, (4) one-half to dividends, one-fourth to consumption, and one-fourth to employee compensation, and (5) half to property income in general and half to consumption. In its original (1987) study of tax burdens and in the (1988) update, the Congressional Budget Office allocated the corporate tax burden in two ways: (1) entirely to capital income and (2) half to capital income and half to labor income. The Joint Committee on Taxation has not attempted to allocate the burden of corporate income tax to individuals.

The assumptions correspond to those conventionally employed in contemporary analyses of the distributional implications of tax changes. Early analyses by the Department of the Treasury in the 1930s and 1940s allocated the burden of the corporate income tax by income class on the basis of dividends or stockholdings. More recently, Department of the Treasury analyses of the distribution by income class of federal income taxes have consistently allocated the burden of the corporate tax to owners of capital. In *Blueprints*, the corporate income tax was allocated on the basis of total capital income. Similarly, in constructing Family Economic Income, the Department of the Treasury has allocated the corporate tax to families on the basis of their total capital income.

81. The tax rates reflect the burden of the corporate tax borne by foreign investors and tax-exempt institutions, other than pensions, through their ownership of U.S. capital. The portion of the corporate tax falling on assets owned by pension funds is allocated to the individuals with rights to the pension reserves.

82. Family economic income is constructed by adding to adjusted gross income: unreported and underreported income; IRA and Keogh deductions; nontaxable transfer payments such as Social Security and AFDC; employer-provided fringe benefits; inside buildup on pensions, life insurance, and IRA and Keogh accounts; tax-exempt interest; and imputed rent on owner-occupied housing. Capital gains are computed on an accrual basis, adjusted for inflation to the extent reliable data allow. Inflationary losses of lenders are subtracted and gains of borrowers are added. The economic incomes of all members of a family unit are summed to produce the family economic income used in the distributional analysis.

83. The rate of inflation is assumed to be 3.5 percent per annum.

84. The revenue estimates have assumed an average excludability rate of 56 percent, implying that 56 percent of the distributions of corporations will be excluded from income have tax credits attached that can be used by the recipient of the distribution to offset taxes. This rate consists of a base rate of 51 percent and an additional 5 percent representing carryovers of excess amounts in Earnings Distribution Accounts from prior years to exclude dividends in the current year.

The low average excludability rate is accounted for by the fact that many corporations that distributed income to shareholders have paid no (or little) tax on that income. That is, much of the income distributed represents preference or foreign source income not taxed at the corporate level. Moreover, many corporations whose income is taxed more fully have low dividend payout ratios. The assumed excludability rate of 56 percent is based on Department of the Treasury calculations.

85. The EDA is calculated as taxes after credits multiplied by $(1 - t_c)/t_c$, where t_c is the corporate tax rate, to gross up the amount of income available to pay excludable dividends. For example, for income of \$100 and taxes paid of \$34, \$66 is available to pay dividends. The EDA also is $\$66 [(0.66/0.34) \times \$34]$.

86. Thus, individuals cannot exclude dividends from foreign source income except to the extent that U.S. tax is paid.

APPENDICES

Appendix A

1. Treas. Reg. § 301.7701-2(a)(1). Two characteristics, associates and an objective to carry on business and divide the profits, are common to partnerships and corporations and are therefore not material in distinguishing between partnerships and corporations.

2. IRC § 7704.

3. IRC § 851 et seq.

4. IRC § 856 et seq.
5. IRC § 860A et seq.
6. Exceptions include: (1) interest on purported debt that is properly viewed as equity (see, e.g., IRC § 163(e)(5)), (2) interest on debt used to finance certain tax-favored income (see, e.g., § 265(a)(2)), and (3) interest that must be capitalized because the debt relates to the production of future income (see, e.g., IRC § 263A(f)).
7. The Code treats a distribution as a dividend to the extent of current and accumulated earnings and profits of the distributing corporation. Distributions that exceed earnings and profits are treated as a tax-free return of basis to the extent of the shareholder's basis in the stock. To the extent that the distributions exceed basis, they are generally treated as capital gains. IRC § 301(c).
8. Capital gains of individuals are subject to a maximum tax rate of 28 percent. IRC § 1(h).
9. A domestic corporation also is entitled to a dividends received deduction (in the percentage specified in IRC § 243) for the U.S. source portion of dividends received from a foreign corporation that is at least 10 percent owned by the U.S. corporation. The deduction is 100 percent for a wholly owned subsidiary whose income is all effectively connected with a U.S. trade or business. IRC § 245.
10. IRC § 385(b).
11. The data reflect corporate taxes at both the central government and local levels. Comparisons of corporate tax receipts for central governments only would be misleading because some countries have much greater corporate taxation at the local level than others. Organisation for Economic Co-operation and Development (1991), Table 13, p. 78.

Appendix B

1. We believe that the descriptions that follow are complete as of December 1991. They are based in part on secondary sources. We are grateful to those government officials, academics, and practitioners who gave us their comments.
2. The amount of the imputation credit is $[F/(1 - .39)] \times .39$, where F equals the amount of the distribution from the franking account.
3. The amount added to the franking account each year is $(61/39 \times T) + D$, where T is the total Australian tax paid by the corporation in the relevant period and D is the amount of franked dividends received from other resident corporations that period.
4. For example, an individual shareholder owns a share with a paid-up value of AU\$1.00 and a market value of AU\$2.50. The shareholder's basis in the share is AU\$2.00. The corporation buys the share (and has taxable income sufficient to frank fully all dividends paid that year). If the buyback is off-market, then the difference between AU\$2.50 (amount paid) and AU\$1.00 (paid up value) is a dividend (AU\$1.50). That part of the purchase price not treated as a dividend (the paid up value of AU\$1.00) is consideration received in the sale. Thus, the shareholder also has a capital loss of AU\$1.00 (AU\$1.00 paid up value minus AU\$2.00 basis). If the buyback is instead on-market, the total purchase price (AU\$2.50) is consideration in the sale, and the shareholder has a capital gain of AU\$0.50 (AU\$2.50 minus AU\$2.00 basis). The corporation, however, must debit its franking account by AU\$1.50, the amount that would have been a dividend if the purchase were off-market.
5. The required franking amount equals: $CD \times [RFS / (TD + CFD + SDD)]$, where CD is the current dividend and RFS is the franking surplus. RFS is reduced by any unpaid dividends with an earlier reckoning day. (The reckoning day is normally the day that the dividend is paid, but sometimes dividends that are part of the same distribution are not paid on the same day. In that case the reckoning day is the day that the first of those dividends is paid.) TD is the total amount of dividends paid or to be paid on the same class of shares and under the same resolution as the current dividend. CFD is the amount of the committed future dividends (not in TD) at the beginning of the reckoning day for the current dividend. SDD (same day dividends) have the same reckoning day but are paid or to be paid under a different resolution or under the same resolution on a different class of shares.
6. Thus, the corporation pays a franking deficit tax equal to the franking deficit grossed-up at the corporate rate and then multiplied by that rate: $[FD / (1 - .39)] \times .39$, where FD equals the amount of the franking deficit.

7. Implementation of an accompanying foreign investment fund regime recently was postponed to July 1, 1992. This regime is similar in purpose, though not in details, to the U.S. PFIC rules of IRC §§ 1291-1297.

8. For example, if a shareholder receives a taxable dividend of \$100, he includes \$125 in income and receives a Federal tax credit of \$16.75. Assuming the provincial rate is 50 percent of the Federal liability, the \$16.75 Federal credit reduces provincial tax liability by \$8.38 (\$16.75/2). The total tax saved as a result of the credit is \$25.13.

9. The following table illustrates the Canadian system with respect to the business income of a Canadian corporation. (This analysis does not deal with the investment income of a Canadian private corporation, which is subject to a somewhat different regime.) The table assumes, for purposes of the provincial tax, that the dividend paying corporation is both resident in, and doing business in, Ontario, and that the individual Canadian shareholder also is resident in Ontario. Three cases are shown: a normal Canadian corporation, subject to a 28 percent Federal tax plus a 3 percent surtax and a 15.5 percent Ontario tax; a Canadian manufacturing company, subject to a 23 percent Federal tax plus a 3 percent surtax and a 14.5 percent Ontario tax; and a small business corporation subject to a 12 percent Federal tax on its business income (not exceeding \$200,000 per year) plus a 3 percent surtax and a 10 percent Ontario tax. The shareholder is assumed to be subject to Federal income tax at the top rate of 29 percent (before credit) plus a 5 percent surtax, and an Ontario tax equal to 53 percent of the Federal tax (after shareholder credit). For simplicity, these rates do not reflect the Federal and provincial surtax on high-income individuals.

	Normal Corporation	Manufacturing Corporation	Small Business Corporation
Net income of Canadian corporation	100.00	100.00	100.00
Federal tax	28.00	23.00	12.00
Federal surtax (3%)	0.84	0.84	0.84
Ontario tax	15.50	14.50	10.00
Total Federal and provincial tax	44.34	38.34	22.84
Maximum distribution to shareholder	55.66	61.66	77.16
25 percent gross-up	13.92	15.42	19.29
Taxable income of shareholder	69.58	77.08	96.45
Federal pre-shareholder credit income tax	20.18	22.35	22.97
Dividend received credit (67% of gross-up)	9.28	10.28	12.86
Federal tax after shareholder credit	10.90	12.07	15.11
Federal surtax (5%)	0.55	0.60	0.76
Ontario tax (53% of pre-surtax, post-credit, Federal tax)	5.78	6.40	8.01
Total Federal and provincial shareholder tax	17.23	19.07	23.88
Total value of credit to shareholder (Federal credit plus .53% of Federal credit)	14.20	15.73	19.68
Value of credit as a percentage of gross-up	102.0%	102.0%	102.0%
Credit as a percentage of Federal and provincial corporate tax	32.0%	41.0%	86.2%

10. These amounts are indexed for inflation.

11. Assume, for example, that a regular corporation earns \$25 of preference income and \$100 of taxable income. Assume, in addition, that a regular corporation is subject to Federal tax at a net rate of 28 percent (i.e., after the provincial abatement) and that a shareholder is subject to Federal tax at a rate of 29 percent (both assumptions disregard surtaxes). Taking into account only Federal tax, the corporation pays \$28 of tax. When net income of \$97 is distributed, the shareholder includes \$121.25 in income (\$97 × 125 percent), has tax liability of \$35.16 and is entitled to a credit of \$16.25, reducing shareholder tax to \$18.91. The total Federal tax burden on \$125 of economic income is thus \$46.91 (\$28 + \$18.91), or 47 percent. Thus, the income has been taxed at a rate greater than either the shareholder or the corporate rate. If, on the other hand, the corporation had earned \$125 of preference income and \$100 of taxable income, the total Federal tax burden on \$225 of economic income would be \$46.91, or 21 percent.

12. Special rules apply with respect to dividends on redeemable preference shares.

13. When the *avoir fiscal* was enacted in 1965, the French corporate tax rate on distributed (and retained) profits was 50 percent. The 50 percent *avoir fiscal* percentage was chosen in order to provide shareholders with a partial imputation credit equal to 50 percent of the taxes actually paid by a corporation on distributed profits. When the corporate tax rate was reduced to 42 percent in 1988, however, the *avoir fiscal* percentage also was not reduced to preserve the 50 percent relationship between the *avoir fiscal* and actual corporate tax payments. Instead, the *avoir fiscal* percentage was maintained at 50 percent as a means of introducing a greater degree of integration. As a result, the *avoir fiscal* represented a greater percentage (69 percent) of actual corporate tax payments on distributed profits. With the further reduction of the tax rate on distributed profits to 34 percent for 1992, the *avoir fiscal* will represent almost the entire amount of corporate level tax paid on distributed profits.

14. Net operating losses generally may be carried forward for 5 years, although net operating losses attributable to depreciation may be carried forward indefinitely. If a net operating loss fully offsets taxable income in a carryover year, a dividend distribution out of carryover year income will incur the *precompte mobilier*. A corporation may elect, however, to spread a net operating loss carryover over the 5 year carryover period in order to leave some fully-taxed income in each year of the carryover period from which to make dividend distributions.

Alternatively, a corporation may elect to carry back over a 3 year period a tax credit calculated by applying to the amount of the loss the standard corporate tax rate in effect at the end of the loss year. The tax credit may be used to offset income tax liability on undistributed fully-taxed profits realized during the 3 year carryback period. Any excess credit remaining thereafter is refunded.

Net operating losses cannot be carried back to offset any portion of the prior years' income for which tax liability was satisfied using *avoir fiscal* or other tax credits.

15. Rather than separating income into fully-taxed and untaxed baskets, France effectively relies on the ability of French corporations to avoid the *precompte mobilier* out of retained earnings with respect to income taxed at rates less than 34 percent. For example, assume that a corporation has F1000 of gross income, F500 of which is taxable at 34 percent and F500 of which effectively is taxable at 19 percent, e.g., a dividend from a foreign corporation resident in a treaty country paid to a French nonparent corporation that is subject to a 15 percent foreign withholding tax. If the corporation distributes its entire after-tax income of F735, this amount will be subdivided into two parts: a dividend of F330, which has borne regular corporate tax, and a dividend of F405, which has not borne corporate tax. The *precompte mobilier* will be imposed on F405 at a rate of 50 percent, resulting in an additional tax liability of F202.50. Thus, the total tax liability of the corporation will be F467.50, and the corporation will be required to pay the additional F202.50 liability out of retained earnings.

As a practical matter, a corporation wishing to distribute tax-sheltered income will reduce the amount of its dividend so it can pay its *precompte mobilier* liability out of current after-tax income. In the above example, the corporation would pay a dividend of F600, equal to F330 (income that has borne regular 34 percent corporate tax) plus F270 (income that is subject to a *precompte mobilier* of 50 percent). The corporation's total tax liability would be F400, equal to F265 regular corporate tax plus F135 *precompte mobilier*.

16. The participation exemption results in an effective tax rate of (1) 2.55 percent on the gross amount of a dividend (including the amount of the *avoir fiscal*) received from a 10 percent-owned French subsidiary, and (2) 1.70 percent on the gross amount of a dividend (including the amount of a credit for foreign withholding tax) received from a 10 percent-owned subsidiary in a treaty country.

17. In some circumstances, a French company may elect to be taxed on all foreign branch income. In such cases, the *precompte mobilier* is not imposed upon distribution of the foreign branch income.

18. The purpose of the special rules is to avoid an effective tax surcharge that arose under pre-1990 law. Dividends received by a French holding company from a foreign subsidiary are exempt from French income tax in the hands of the holding company by virtue of the participation exemption. Prior to 1990, however, the foreign source dividend income was subject to the *precompte mobilier* upon redistribution by the holding company. Payment of the *precompte mobilier* by the holding company entitled the recipient to claim an *avoir fiscal* credit with respect to the redistribution. If the recipient was a French 10 percent shareholder of the holding company, however, the participation exemption would exempt the income again in the hands of the 10 percent shareholder. Thus, the *avoir fiscal* was not needed to offset income tax liability of the 10 percent shareholder with respect to the dividend income. Under pre-1990 law, moreover, the *avoir fiscal* could not be used to offset income tax liability of the 10 percent shareholder with respect to other types of income. Pre-1990 law did permit the 10

percent shareholder to use the avoir fiscal to offset any precompte mobilier liability that it might incur upon a subsequent distribution of preference income; if the 10 percent shareholder did not have sufficient preference income however, all or a portion of the avoir fiscal (which had been "paid for" by the French holding company) was lost.

19. The amount of the excess tax equals the amount distributed out of EK 50 (or EK 56), grossed-up to its pre-tax equivalent, and then multiplied by the difference between 50 percent (or 56 percent) and 36 percent (the distribution rate). Accordingly, if D equals distributions out of EK 50 (or EK 56), the corporation receives a refund of $D/.50 \times .14$ (or $D/.44 \times .20$). For example, if a corporation earns DM100 and pays tax of DM50, it will have DM50 in its EK 50 account. If it then redistributes DM50 out of EK 50, the corporation will receive a refund equal to DM14 ($DM50/.50 \times .14$).

20. The following table illustrates the application of the German split rate and imputation credit systems. For simplicity, the table ignores any surtaxes.

Income before taxes		DM100.00
Tentative corporate tax		DM50.00
Decrease in corporate tax on full distribution		DM14.00
Amount available for distribution		DM64.00
Withholding tax (25 percent)		DM16.00
Shareholder includes in income		DM100.00
Cash dividend	DM48.00	
Withholding tax credit	DM16.00	
Imputation credit	<u>DM36.00</u>	
	DM100.00	
Shareholder tax liability (53 percent rate)		DM53.00
Shareholder credit		DM52.00
Withholding tax credit	DM16.00	
Imputation credit	<u>DM36.00</u>	
	DM52.00	
Net amount due		DM1.00

21. The following equation converts pre-tax income subject to tax at some non-EK rate into equivalent amounts of pre-tax income subject to tax at the distribution rate (36 percent) and either the statutory rate (50 percent) or the zero rate: $.36X + (.5 \text{ or } 0) \times (Y - X) = T$, where Y equals the total amount of pre-tax income (known) subject to some non-EK rate, X equals pre-tax income subject to the distribution rate, $(Y - X)$ equals pre-tax income subject to either the statutory rate or zero rate, and T equals the amount of tax paid with respect to Y (known). Because X and $(Y - X)$ must be positive, the effective tax rate, T/Y , determines whether the equation must contain the statutory rate or zero rate (and whether the residual amount of income is ultimately converted into EK 50 or EK 0).

The following equations convert the pre-tax amounts, X and $(Y - X)$, into their after-tax EK amounts:

$$\begin{aligned} \text{EK 36} &= (1 - .36) \times X \\ \text{EK 50 (if } T/Y > .36) &= (1 - .50) \times (Y - X) \\ \text{EK 0 (if } T/Y < .36) &= Y - X \end{aligned}$$

22. Specifically, the calculation converts the DM100 into DM71.4 of income subject to the 36 percent distribution rate ($.36 + .5 \times (DM100 - X) = DM40$) and the remainder, DM28.6, into income subject to the 50 percent statutory rate ($DM100 - DM71.4 = DM28.6$). This translates into available net equity of DM45.7 in the EK 36 category ($.64 \times DM71.4$) and DM14.3 in the EK 50 category ($.50 \times DM28.6$).

23. Specifically, the calculation converts the DM100 into DM69.4 of income subject to the 36 percent distribution rate ($.36X = DM25$) and the remainder, DM30.6, into income subject to the zero rate ($DM100 - DM69.4 = DM30.6$). This translates into available net equity of DM44.4 in the EK 36 category ($.64 \times DM69.4$) and DM30.6 in the EK 0 category ($DM100 - DM69.4$).

24. The rules for carrybacks and carryforwards of net operating losses are designed to prevent the refund of an amount of tax that, by virtue of the imputation credit, has already been used to offset shareholder taxes. In summary, when a German corporation suffers a net operating loss for a year, it first enters the full amount of the loss as a negative adjustment to its

EK 02 account. The corporation may then carry back the loss for two years and (to the extent the loss is not absorbed in these years) may carry forward the loss indefinitely.

With respect to carrybacks, the loss may be deducted in the earlier year, and generate a refund, only to the extent of taxable income in that year less the sum of (1) any distributions in that year and (2) the distribution tax (36 percent) on such distributions. In effect, a carryback deduction is only allowed against taxable income if the tax on such income has not already been returned to shareholders by way of credit.

If the NOL is not absorbed through carrybacks, it is carried forward and deducted in later years. As the loss is deducted (and is thereby automatically reflected in the EK 50 account), it is credited against the original negative adjustment to the EK 02 account.

25. All German enterprises (including foreign corporations with permanent establishments in Germany) also are subject to the municipal "trade tax." This tax has both income tax and capital tax components. The basic trade tax rates are set by the Federal Government, but the local governments (which collect the tax) have considerable discretion to increase them. The income tax component is typically 15 percent. The trade tax is deductible in computing a corporation's normal tax liability. The trade tax is not taken into account in the examples in this summary.

26. Tax is always withheld on dividends at the statutory 25 percent rate at the time of distribution (except as noted below). Shareholders entitled to reduced withholding under a treaty must apply the German tax authorities for a refund of the excess withholding. This rule applies even to publicly traded shares.

Some treaties contain an anti-avoidance rule designed to discourage corporations from distributing profits to nonresident shareholders who reinvest these profits in the same corporation in order to gain the benefit of the lower distribution rate on what are, in effect, retained profits. Such distributions are subject to a higher withholding tax than normal distributions. (The 1954 U.S.-Germany treaty had such a provision, but it was unilaterally waived by Germany in 1981.)

27. The following example illustrates the treatment of foreign source income and foreign stockholders. Assume a German corporation has two foreign branches, the first in a treaty country (Country 1) and the second in a nontreaty country (Country 2). The corporation has DM100 of German profits, DM100 of Country 1 profits, and DM100 of Country 2 profits (all pre-tax). The German profits are taxed at the statutory rate of 50 percent. The Country 1 profits are taxed in Country 1 at a rate of 25 percent and are exempt in Germany (under the Business Profits and Double Taxation articles of the treaty). The Country 2 profits are taxed in Country 2 at a rate of 30 percent and are subject to tax in Germany, but the German tax is reduced by a foreign tax credit. During the next year (when the corporation has no profits anywhere), all of the prior year profits are distributed to a foreign shareholder (who enjoys no treaty benefits).

The German profits of DM100 produced equity of DM50 in the EK 50 account. When these profits are distributed, the corporation receives a refund of DM14, also distributed to the foreign shareholder. The distribution of DM64 is subject to 25 percent withholding of DM16. The foreign shareholder receives no imputation credit with respect to this distribution.

The Country 1 profits of DM100 produced equity of DM75 in the EK 01 account. When this equity is distributed, it is subject to the 36 percent distribution tax (DM27), but the tax is credited and refunded to the foreign shareholder. The entire distribution (DM75 – DM27 + DM27) is subject to 25 percent withholding (DM18.75).

The Country 2 profits of DM100 were reduced by DM30 of Country 2 tax, and then by an additional DM20 of German tax (at the statutory rate of 50 percent after the foreign tax credit). In allocating this income to EK accounts, the corporation is considered to have paid tax of DM20 on profits of DM70 (an overall tax rate of 28.6 percent). Specifically, the corporation is treated as having paid a 36 percent tax on DM55.6 and a 0 percent tax on DM14.4. This produced equity of DM35.6 in EK 36 ($55.6 - (55.6 \times 36\%)$) and DM14.4 in EK 01. When the profits are distributed, the distribution out of EK 36 is not subject to any further tax and produces a refunded credit of 36/64, or DM20. The distribution out of EK 01 is subject to the 36 percent distribution tax, which is refunded. This results in a distribution, including refunds, of DM70 ($DM35.6 + DM20 + DM14.4 - DM5.2 + DM5.2 = DM70$). The total distribution is subject to statutory withholding of 25 percent (DM17.5).

The treatment of pre-1977 profits is illustrated by the following. Assume the corporation in the above example had only DM100 of German profits, which were earned in 1976 and were subject to a tax of 56 percent at that time. The net profits of DM44 were placed in EK 03 in 1977, when the integration system was implemented. When these profits are distributed to a foreign shareholder in 1990, they are subject to a distribution tax of 36 percent (DM15.8), which is credited and refunded to the shareholder, producing a total distribution of DM44. This total distribution is subject to statutory withholding of 25 percent (DM11).

28. The following example illustrates the mechanics of New Zealand's credit system. A corporation earns income of NZ\$100, of which NZ\$60 is taxable, and the tax is NZ\$19.80 (at a 33 percent rate). The corporation distributes the remaining NZ\$81.20 to its shareholders. The payment of tax of NZ\$19.80 gives rise to a credit to the ICA in the same amount. The maximum amount of credits that can be allocated to the distribution is NZ\$33.99 ($\text{NZ\$60} \times .33 / (1 - .33)$). However, the corporation only allocates a credit of NZ\$19.80 to the distribution to avoid having a negative ICA and incurring penalties. Not taking into account the refundable resident withholding tax, the shareholder would include NZ\$100 in income (the cash distribution plus the attached credits), and have tax liability of NZ\$33 and a credit of NZ\$19.80. As a result, the shareholder has additional tax liability of NZ\$13.20.

29. Until March 31, 1991, the CFC regime applied only to a transitional list of low-tax countries (the "black list" countries). As of April 1, 1991, the new regime applies in full to a CFC resident in any country other than Australia, the United States, the United Kingdom, Japan, France, Germany or Canada (the "grey list" countries). The CFC rules apply to investors in a CFC resident in a grey list country only if the CFC has taken advantage of overseas "specified tax preferences," and only if New Zealand tax exceeds the foreign tax that would be payable if the item were not a preference under that foreign country's tax laws. To date, there is only one scheduled specified tax preference, namely, any exemption from income tax for income derived from a business carried on outside the country.

30. The shareholder continuity rules do not apply to any corporation whose shares are listed on the New Zealand Stock Exchange.

31. The amount of the imputation credit is $[(D/(1-.25))] \times .25 = D/3$ where D equals the amount of net qualifying distributions.

32. The following example illustrates the mechanics of the imputation credit and ACT. The example assumes: (1) a corporate tax rate of 33 percent, (2) a basic personal rate of 25 percent, (3) that all shareholders are taxed at a marginal rate of 25 percent, and (4) that the corporation distributes to shareholders all after-tax (including ACT) earnings.

A.	Corporate income before preferences	£100.00
B.	Preference deductions or exclusions (e.g., accelerated cost recovery in excess of book depreciation)	40.00
C.	Corporate taxable income (A-B)	60.00
D.	Corporate tax (.33 × C)	19.50
E.	Cash distributions to shareholders ((A-F-I) or (A-[(.33-.25)/1.33])	71.40
F.	ACT ($E \times .25 / (1 - .25)$)	23.80
G.	Limit on use of ACT (.25 × C)	15.00
H.	ACT applied against mainstream corporate tax (lesser of F and G)	15.00
I.	Net mainstream tax (D-H)	4.80
J.	Total tax paid by corporation (F+I)	28.60
K.	Retained earnings (A-E-J)	0.00
L.	Surplus ACT credit available for carryback or carryforward (F-H)	8.80
M.	Shareholder income (E+F)	95.20
N.	Shareholder tax (.25 × M)	23.80
O.	Shareholder tax net of imputation credit (N-F)	0.00
P.	Total corporate and shareholder tax paid (J+O)	28.60

If the shareholder in the example were instead a tax-exempt entity, the shareholder would be eligible for a refund of the entire imputation credit of £23.80. Accordingly, the total tax paid by the corporation and the shareholder would be £4.80, the net mainstream tax paid by the corporation.

33. An indirect foreign tax credit is allowed with respect to taxes paid by a foreign corporation to a U.K. corporation that owns at least 10 percent of the foreign corporation. A similar credit is allowed if the foreign corporation is a controlled foreign corporation the income of which is taxed currently to a U.K. shareholder.

34. Assume that a corporation earns £100 (of which £70 is U.K. source and £30 is foreign source income) and pays foreign tax of £9 on the foreign source income (at a 30 percent rate). The corporation's mainstream tax is £24, of which £23.10 is attributable to U.K. income ($.33 \times £70$) and £0.90 is attributable to foreign source income ($(.33 \times £30) - £9$). The corporation distributes £60 and pays ACT of £20. Under the general limit described in Section B.6.b, the corporation may apply the ACT of £20 against its mainstream tax on U.K.-source income only to the extent of 25 percent of £70, or £17.50. The corporation also may apply ACT against the £0.90 of U.K. mainstream tax payable on the foreign source income (the

lesser of the mainstream tax payable and 25 percent of £30 of foreign source income). Thus, the corporation offsets £18.40 (£17.50 + £0.90) of ACT against its mainstream tax liability of £24 and therefore must make an additional payment of £5.60. The corporation's total U.K. tax liability is £25.60.

35. The following example illustrates the difference in treatment of shareholders in countries with such treaties and shareholders in countries without such treaties.

Example. A corporation distributes a total of £300, consisting of £75 to each of the following: Shareholder A, a national of a nontreaty country, Shareholder B, a U.S. national owning less than 10 percent of the stock, Shareholder C, a U.K. resident, and Shareholder D, a U.S. national owning at least 10 percent of the stock. Shareholders A and C are subject to tax in the United Kingdom at a marginal rate of 40 percent, Shareholder B is subject only to the 15 percent withholding tax, and Shareholder D is subject only to the 5 percent withholding tax. The corporation pays ACT of £100 ($£300 \times .25 / (1 - .25)$), or £25 on each distribution.

Shareholder A is treated as receiving a distribution of only the £75 actually paid to him and is liable for tax of £30 ($.40 \times £75$). Shareholder A is treated as having paid tax of £18.75 ($.25 \times £75$) due to the ACT paid by the corporation. Thus, Shareholder A must pay an additional £12.25.

Shareholder B is treated as receiving a distribution of £100 and is liable for tax of £15 ($.15 \times £100$). Shareholder B is treated as having paid £25 (ACT paid on the distribution), and thus is entitled to a refund of £10.

Shareholder C also is treated as receiving a distribution of £100 and is liable for tax of £40. Shareholder C is treated as having paid £25, and thus must pay an additional £15.

Shareholder D is treated as receiving a distribution of £87.50 (£75 actually distributed plus one-half of the ACT) and is liable for tax of £4.38 ($.05 \times £87.50$). Shareholder D is treated as having paid £12.50 (one-half of the ACT), and thus is entitled to a refund of £8.13.

Appendix C

1. In that case, the credit would not only be nonrefundable but also would not be allowed to offset tax on other income of shareholders subject to tax at less than the maximum rate. The imputation credit prototype, described in Chapter 11, is a hybrid of these two approaches. It allows credits at the maximum shareholder rate but permits low-bracket shareholders to use excess credits against other tax liability.

2. The second to last column of the example that follows in the text illustrates that this approach will pass through preferences if the corporate and shareholder rates are identical.

3. Corporate tax credits could be passed through by treating credits as equivalent to corporate taxes paid. Corporate preferences that are exclusions from income could be passed through to shareholders by a separate accounting at the corporate level and exclusion at the shareholder level. Passing through deferral preferences, however, would be more difficult because some account would have to be taken of their reversal over time. The corporate AMT, for example, has a credit for AMT taxes against future regular income taxes. Alternatively, asset basis might be adjusted. Either of these approaches would be complicated at the shareholder level. See McLure (1979), pp. 95-99.

4. There may be an indirect benefit to tax-exempt shareholders if a dividend exclusion system results in increased stock prices.

GLOSSARY

AFCE: Allowance for Corporate Equity. See Section 12.B.

ACT: Advance Corporation Tax (United Kingdom). See Appendix B, Section B.6.

ALI: American Law Institute.

AMT: Alternative minimum tax. See Appendix A, Section A.1.

AMTI: Alternative minimum taxable income. See Appendix A, Section A.1.

Capital export neutrality: The principle that investors should pay equivalent taxes on capital income, regardless of the country in which the income is earned. See Section 7.B.

Capital import neutrality: The principle that all investments within a country should face the same tax burden, regardless of whether they are owned by a domestic or a foreign investor. See Section 7.B.

CBIT: Comprehensive Business Income Tax. See Chapter 4.

C corporation: A corporation taxed under the classical system as set forth in Subchapter C of the Internal Revenue Code. See Appendix A, Section A.1.

CGE model: Computable general equilibrium model. See Section 13.C.

Classical system: The two-tier corporate tax system, which taxes earnings on equity capital at both the corporate and shareholder level.

Code: The Internal Revenue Code of 1986, as amended.

DRD: Dividends received deduction. See Appendix A, Section A.1.

DRIP: Dividend reinvestment plan. See Chapter 9.

EDA: Excludable Distributions Account. See Sections 2.B and 4.B.

EK: Eigencapital (equity capital) (Germany). See Appendix B, Section B.4.

FEI: Family Economic Income. See Section 13.G.

GDP: Gross domestic product. The value of final goods and services produced by factors of production in the United States.

GNP: Gross national product. The value of final goods and services produced by U.S. owned factors of production, including factors that are actually used overseas.

ICA: Imputation Credit Account (New Zealand). See Appendix B, Section B.5.

Inbound investment: Investment by foreign persons in the United States. See Section 7.A.

IRS: Internal Revenue Service.

MPM: Mutual production model. See Section 13.F.

MTD: Minimum tax on distributions. See Section 12.C.

NNP: Net national product. GNP minus capital consumption (depreciation).

NOL: Net operating loss. See Appendix A, Section A.1.

OECD: Organisation for Economic Co-operation and Development

OID: Original issue discount. The OID rules govern the accrual of discount on debt. Discount is economically equivalent to interest.

Outbound investment: Investment by U.S. persons in foreign countries. See Section 7.A.

PA model: Portfolio allocation model. See Section 13.F.

REIT: Real estate investment trust. See Appendix A, Section A.1.

REMIC: Real estate mortgage investment conduit. See Appendix A, Section A.1.

RIC: Regulated investment company. See Appendix A, Section A.1.

R&D: Research and development.

S corporation: A corporation which bears no corporate tax and whose shareholders are taxed under the passthrough regime set forth in Subchapter S of the Internal Revenue Code. See Appendix A, Section A.1.

SCA: Shareholder Credit Account. See Section 11.B.

S&L: Savings and loan association.

Subchapter C: The portion of the Internal Revenue Code that governs the taxation of corporations under the classical system. See Appendix A, Section A.1.

UBIT: Unrelated business income tax. A tax-exempt entity is subject to UBIT on income derived from a business unrelated to the entity's exempt purpose and on certain passive income to the extent it is financed with debt.

BIBLIOGRAPHY

- Aaron, Henry J., "A new view of property tax incidence," *American Economic Review*, Vol. 64 (May 1974). p. 212.
- Aaron, Henry J. and Harvey Galper, Assessing Tax Reform. Washington: The Brookings Institution (1985).
- Accounting Principles Board, Opinion No. 11, Accounting for Income Taxes (1967).
- Accounting Principles Board, Opinion No. 23, Accounting for Income Taxes -- Special Areas (1972).
- Agrawal, Anup and Gershon N. Mandelker, "Managerial incentives and corporate investment and financing decisions," *The Journal of Finance*, Vol. 42 (September 1987). p. 823.
- Ambarish, Ramasastry, Kose John, and Joseph Williams, "Efficient signalling with dividends and investments," *The Journal of Finance*, Vol. 42 (June 1987). p. 321.
- American Bar Association, Section on Taxation, "Banking and savings institutions," *Tax Lawyer*, Vol. 37 (1984). p. 795.
- American Bar Association, Section on Taxation, "Banking and savings institutions," *Tax Lawyer*, Vol. 38 (1985). p. 819.
- American Bar Association, Section on Taxation, Earnings and Profits Work Group, "Elimination of 'earnings and profits' from the Internal Revenue Code," *Tax Lawyer*, Vol. 39 (1986). p. 285.
- American Bar Association, Section on Taxation, and New York State Bar Association, Tax Section, Corporate Tax Reform: A Report of the Invitational Conference on Subchapter C (1988).
- American Law Institute, Federal Income Tax Project, Reporter's Study Draft, Subchapter C (Supplemental Study). Philadelphia (1989). The Memorandum was written by Professor William D. Andrews of the Harvard Law School.
- American Law Institute, Federal Income Tax Project, Integration of the Individual and Corporate Income Taxes, Reporter's Memorandum No. 1. Philadelphia (1990). The Memorandum was written by Professor Alvin C. Warren of the Harvard Law School.
- American Law Institute, Federal Income Tax Project, Integration of the Individual and Corporate Income Taxes, Reporter's Memorandum No. 2. Philadelphia (January 15, 1991). The Memorandum was written by Professor Alvin C. Warren of the Harvard Law School.
- American Law Institute, Federal Income Tax Project, Integration of the Individual and Corporate Income Taxes, Reporter's Memorandum No. 3. Philadelphia (draft of April 7, 1991). The Reporter is Professor Alvin C. Warren of the Harvard Law School.
- Ando, Albert and Franco Modigliani, 'The life cycle' hypothesis of saving: aggregate implications and tests," *American Economic Review*, Vol. 53 (March 1963). p. 55.
- Andrews, William D., "Out of its earnings and profits: some reflections on the taxation of dividends," *Harvard Law Review*, Vol. 69 (1956). p. 1403.
- Andrews, William D., "Tax neutrality between equity capital and debt," *Wayne Law Review*, Vol. 30 (1984). p. 1057.
- Andrews, William D., "A consumption-type or cash flow personal income tax," *Harvard Law Review*, Vol. 87 (1974). p. 1113.
- Ang, James and David Peterson, "Optimal debt versus debt capacity: a disequilibrium model of corporate behavior," Research in Finance, Vol. 6, A. Chen, editor. Greenwich, CT: JAI Press (1986).
- Auerbach, Alan J., "Wealth maximization and the cost of capital," *Quarterly Journal of Economics*, Vol. 93 (August 1979). p. 433.
- Auerbach, Alan J., "Tax integration and the new view of the corporate tax: a 1980 perspective," Proceedings of the 74th Annual Conference. Columbus: National Tax Association and Tax Institute of America (1981).
- Auerbach, Alan J., "Corporate taxation in the United States," *Brookings Papers on Economic Activity*, Vol. 2 (1983). p. 451.
- Auerbach, Alan J., "Taxation, corporate financial policy, and the cost of capital," *Journal of Economic Literature*, Vol. 21 (September 1983). p. 905.
- Auerbach, Alan J., "Real determinants of corporate leverage," Corporate Capital Structures in the United States, Benjamin Friedman, editor. Chicago: The University of Chicago Press (1985).

- Auerbach, Alan J., "Tax policy and corporate borrowing," Are the Distinctions Between Debt and Equity Disappearing? Richard Kopecke and Eric Rosengren, editors. Boston: Federal Reserve Bank of Boston (1989).
- Auerbach, Alan J., "Debt, equity, and the taxation of corporate cash flows," Taxes, Debt and Corporate Restructuring, John B. Shoven and Joel Waldfoegel, editors. Washington: The Brookings Institution (1990).
- Auerbach, Alan J. and Kevin Hassett, "Tax policy and business fixed investment in the United States," unpublished paper (1990).
- Auerbach, Alan J. and Kevin Hassett, "Recent U.S. behavior and the Tax Reform Act of 1986: a disaggregate view," Working Paper No. 3626, Cambridge: National Bureau of Economic Research (February 1991).
- Auerbach, Alan J. and James M. Poterba, "Why have corporate revenues declined?" Tax Policy and the Economy, Vol. 1. Lawrence H. Summers, editor. Cambridge: MIT Press (1987).
- Auerbach, Alan and David Reishus, "Taxes and the merger decision," Knights, Raiders, and Targets: The Impact of Hostile Takeovers, John Coffee, Louis Lowenstein, and Susan Rose-Ackerman, editors. New York: Oxford University Press (1988).
- Ault, Hugh J., "International issues in corporate tax integration," *Law and Policy in International Business*, Vol. 10 (1978). p. 461.
- Avi-Yonah, Reuven S., "The treatment of corporate preference items under an integrated tax system: a comparative analysis," *Tax Lawyer*, Vol. 44 (1990). p. 195.
- Bagwell, Laurie Simon and John B. Shoven, "Cash distributions to shareholders," *The Journal of Economic Perspectives*, Vol. 3 (Summer 1989). p. 129.
- Ballard, Charles L., Don Fullerton, John B. Shoven, and John Whalley, A General Equilibrium Model for Tax Policy Evaluation. Chicago: University of Chicago Press (1985).
- Ballard, Charles L., John B. Shoven, and John Whalley, "The total welfare cost of the United States tax system: a general equilibrium approach," *National Tax Journal*, Vol. 38 (June 1988). p. 125.
- Barro, Robert and Xavier Sala-i-Martin, "World real interest rates," NBER Macroeconomics Annual 1990. Cambridge: MIT Press (1990). p. 15.
- Bartholdy, J., G. Fisher and Jack Mintz, "Some theory of taxation and financial policy with application to Canadian corporate data." Paper presented at the Econometric Society Fifth World Congress, Cambridge (1985).
- Batten, Dallas S. and Mack Ott, "The President's proposed corporate tax reforms: a move toward tax neutrality," *Federal Reserve Bank of St. Louis Review*, Vol. 67 (August/September 1985). p. 5.
- Benge, Matt and Tim Robinson, How to Integrate Company and Shareholder Taxation: Why Full Imputation is the Best Answer. Wellington: Victoria University Press for the Institute of Policy Studies (1986).
- Bergsten, C. Fred, Thomas Horst, and Theodore H. Moran, American Multinationals and American Interests. Washington: The Brookings Institution (1978).
- Bernanke, Ben S., "Is there too much corporate debt?" *Federal Reserve Bank of Philadelphia Quarterly Review* (September - October 1989). p. 3.
- Bernanke, Ben S. and John Y. Campbell, "Is there a corporate debt crisis?" *Brookings Papers on Economic Activity 1* (1988). p. 83.
- Bernanke, Ben S., John Y. Campbell, and Toni M. Whited, "U.S. corporate leverage: developments in 1987 and 1988," *Brookings Papers on Economic Activity 1* (1990). p. 255.
- Bhattachaya, Sudipto, "Imperfect information, dividend policy, and the 'bird in the hand' fallacy," *Bell Journal of Economics*, Vol. 10 (Spring 1979). p. 259.
- Bird, Richard M., "International aspects of integration," *National Tax Journal*, Vol. 28 (1975). p. 302.
- Bittker, Boris I., "A 'comprehensive tax base' as a goal of income tax reform," *Harvard Law Review*, Vol. 80 (1967). p. 925.
- Blair, Margaret and Robert Litan, "Corporate leverage and leveraged buyouts in the eighties," Taxes, Debt, and Corporate Restructuring, John B. Shoven and Joel Waldfoegel, editors. Washington: The Brookings Institution (1990).

- Blazenko, George W., "Managerial preference, asymmetric information, and financial structure," *The Journal of Finance*, Vol. 42 (September 1987). p. 839.
- Blinder, Alan and Angus Deaton, "The time series consumption function revisited," *Brookings Papers on Economic Activity* 2 (1985). p. 465
- Blum, Walter J., "The earnings and profits limitation on dividend income: a reappraisal," *Taxes*, Vol. 53 (1975). p. 68.
- Boskin, Michael J., "Taxation, saving and the rate of interest," *Journal of Political Economy*, Vol. 86 (April 1978). p. S3.
- Bosworth, Barry P., Tax Incentives and Economic Growth. Washington: The Brookings Institution (1984).
- Bradford, David F., "The incidence and allocation effects of a tax on corporate distributions," *Journal of Public Economics* Vol. 15 (February 1981). p. 1.
- Bradford, David F., Untangling the Income Tax. Cambridge: Harvard University Press (1986).
- Bradford, William D., "The issue decision of manager-owners under information asymmetry," *The Journal of Finance*, Vol. 42 (December 1987). p. 1245.
- Bradley, Michael, Gregg Jarrell, and E. Han Kim, "On the existence of an optimal capital structure: theory and evidence," *The Journal of Finance*, Vol. 39 (July 1984). p. 857.
- Bravenec, Lorence L., "A nontraditional approach to corporate integration," *Tax Notes* (March 13, 1989). p. 1381.
- Break, George F., "Integrating corporate and personal income taxes: the Carter Commission proposals," *Law and Contemporary Problems*, Vol. 34 (1969). p. 726.
- Break, George F., "Integration of corporate and personal income taxes," *National Tax Journal*, Vol. 22 (1969). p. 39.
- Break, George F., "Corporate tax integration: radical revisions or common sense?" Federal Tax Reform Myths and Realities, Michael J. Boskin, editor. San Francisco: Institute for Contemporary Studies (1978).
- Break, George F. and Joseph A. Pechman, "Relationship between the corporation and individual income taxes," *National Tax Journal* Vol. 28 (1975). p. 341.
- Break, George F. and Joseph A. Pechman, Federal Tax Reform: the Impossible Dream? Washington: The Brookings Institution (1975).
- Breeden Douglas, "An intertemporal capital asset pricing model with stochastic consumption and investment opportunities," *Journal of Financial Economics*, Vol. 7 (1979). p. 265.
- Brittain, John, Corporate Dividend Policy. Washington: The Brookings Institution (1966). p. 74.
- Brown, E. Cary, "Business-income taxation and investment incentives," Income, Employment, and Public Policy: Essays in Honor of Alvin H. Hanson, New York: W. W. Norton & Company, Inc. (1948).
- Bulow, Jeremy I., Lawrence H. Summers, and Victoria P. Summers, "Distinguishing debt from equity in the junk bond era," Debt, Taxes, and Corporate Restructuring, John B. Shoven and Joel Waldfogel, editors. Washington: The Brookings Institution (1990).
- Campbell, John Y. and Richard Clarida, "The term structure of Euromarket interest rates: an empirical investigation," *Journal of Monetary Economics*, Vol. 19 (1987). p. 25.
- Canellos, Peter C., "Corporate tax integration: by design or by default," *Tax Notes* (June 8, 1987). p. 999.
- Caprio, Gerard and David Howard, "Domestic saving, current accounts, and international capital mobility," International Finance Discussion Papers No. 244. Washington: Federal Reserve Board (1984).
- Caves, Richard E., Multinational Enterprises and Economic Analysis. Cambridge: Cambridge University Press (1983).
- Chirelstein, Marvin A., "Optional redemptions and optional dividends: taxing the repurchase of common shares," *Yale Law Journal*, Vol. 78 (1969). p. 739.
- Chirinko, Robert S., "Business investment and tax policy: a perspective on existing models and empirical results," *National Tax Journal*, Vol. 39 (June 1986). p. 137.
- Chirinko, Robert S., "The ineffectiveness of effective tax rates on business investment: A critique of Feldstein's Fisher-Schultz lecture," *Journal of Public Economics*, Vol. 32 (April 1987). p. 369.

- Chirinko, Robert S. and Robert Eisner, "Tax policy and investment in major U.S. macroeconomic econometric models," *Journal of Public Economics*, Vol. 20 (March 1983). p. 139.
- Clark, Robert C., "The morphogenesis of Subchapter C: an essay in statutory evolution and reform," *Yale Law Journal*, Vol. 87 (1977). p.90.
- Cohen, Edwin S., "Possible solutions to practical problems in integration of the corporate and shareholders income tax," *National Tax Journal*, Vol. 28 (1975). p. 359.
- Cohen, Edwin S., Alvin C. Warren, and William D. Andrews, "The meaning of changes within the framework of Subchapter C and the impact on proposals for integration of the corporate and individual income tax," *San Diego Law Review*, Vol. 22 (1985). p. 317.
- Congressional Budget Office, The Changing Distribution of Federal Taxes: 1975-1990 (October 1987).
- Congressional Budget Office, The Changing Distribution of Federal Taxes: A Closer Look at 1980 (July 1988).
- Consultative Committee on Full Imputation and International Tax Reform (The Valabh Committee), Full Imputation, an independent report to the New Zealand Government. Wellington (April 1988).
- Consultative Committee on Full Imputation and International Tax Reform (The Valabh Committee), International Tax Reform: Full Imputation, an independent report to the New Zealand Government. Wellington (July 1988).
- Consultative Committee on the Taxation of Income from Capital (The Valabh Committee), The Taxation of Distributions from Companies, an independent report to the New Zealand Government. Wellington (July 1991).
- Cooper, R., R. Krever, and R. Vann, Income Taxation. Sydney: The Law Book Company Limited (1989).
- Cutler, David M. and Lawrence Summers, "The costs of conflict resolution and financial distress: evidence from the Texaco-Penzoil litigation." *Rand Journal of Economics*, Vol. 19 (Summer 1988). p. 157.
- Daily Tax Report*, "EC Commissioner Scrivener vows to fight proposed environment taxes," (November 8, 1991). p. G-2.
- Dooley, Michael, Jeffrey Frankel, and Donald J. Mathieson, "International capital mobility: what do saving-investment correlations tell us?" International Monetary Fund Staff Papers, Vol. 34 (1987). p. 503.
- Douglas, R., Consultative Document on Full Imputation. Wellington: New Zealand Ministry of Finance (1987).
- Easterbrook, Frank H., "Two agency-cost explanations of dividends," *American Economic Review*, Vol. 74, (September 1984). p. 650.
- Ebrill, Liam P. and David G. Hartman, "On the incidence and excess burden of the corporation income tax," *Public Finance*, Vol. 37 (1982). p. 48.
- Eisner, Robert, "Tax policy and investment behavior: comment," *American Economic Review*, Vol. 59 (June 1969). p. 379.
- Eisner, Robert and M. Nadiri, "Investment behavior and neoclassical theory," *Review of Economics and Statistics*, Vol. 50 (August 1968). p. 369.
- Engel, Charles and Kenneth Kletzer, "Saving and investment in an open economy with non-traded goods," Working Paper no. 2141, Cambridge: National Bureau of Economic Research (1987).
- Fazzari, Steven, R. Glenn Hubbard, and Bruce Petersen, "Financing constraints and corporate investment," *Brookings Papers on Economic Activity I*, (1988). p. 141.
- Federal Reserve Board, Flow of Funds Accounts, Financial Assets and Liabilities, Year End, Board of Governors of the Federal Reserve System (various issues).
- Feenberg, Daniel R. and Jonathan Skinner, "Sources of IRA savings," Tax Policy and the Economy, Vol. 3, Lawrence H. Summers, editor. Cambridge: MIT Press (1988).
- Feldstein, Martin, "Corporate taxation and dividend behaviour," *Review of Economic Studies*, Vol. 37 (February 1970). p. 57.
- Feldstein, Martin, "Corporate taxation and dividend behaviour: a reply and extension," *Review of Economic Studies*, Vol. 39 (April 1972). p. 235.
- Feldstein, Martin, "The incidence of the social security payroll tax: comment," *American Economic Review*, Vol. 62 (September 1972). p. 735.

- Feldstein, Martin, "The income tax and charitable contributions: part II - the impact on religious, educational, and other organizations," *National Tax Journal*, Vol. 28 (June 1975). p. 209.
- Feldstein, Martin, "Inflation, tax rules, and investment: some econometric evidence," *Econometrica*, Vol. 50 (July 1982). p. 825.
- Feldstein, Martin, "Domestic saving and international capital movements in the long run and the short run," *European Economic Review*, Vol. 21 (1983). p. 139.
- Feldstein, Martin, "Imputing corporate tax liabilities to individual taxpayers," Working Paper No. 2349. Cambridge: National Bureau of Economic Research (1987).
- Feldstein, Martin, "Testimony on tax policy aspects of mergers and acquisitions," House of Representatives, Committee on Ways and Means, Serial No. 101-10, Tax Policy Aspects of Mergers and Acquisitions, Part I (January 31, 1989). p. 192.
- Feldstein, Martin and Phillippe Bacchetta, "National saving and international investment," Working Paper No. 3164. Cambridge: National Bureau of Economic Research (1989).
- Feldstein, Martin, Louis Dicks-Mireaux, and James M. Poterba, "The effective tax rate and the pre-tax rate of return," *Journal of Public Economics*, Vol. 21 (July 1983). p. 129.
- Feldstein, Martin and Daniel Frisch, "Corporate tax integration: the estimated effects on capital accumulation and tax distribution of two integration proposals," *National Tax Journal*, Vol. 30 (1977). p. 37.
- Feldstein, Martin and Charles Horioka, "Domestic saving and international capital flows," *The Economic Journal*, Vol. 90 (June 1980). p. 314.
- Feldstein, Martin and Joosung Jun, "The effects of tax rules on nonresidential fixed investment: some preliminary evidence from the 1980s," The Effects of Taxation on Capital Accumulation, Martin Feldstein, editor. Chicago: University of Chicago Press (1987).
- Feldstein, Martin and Joel Slemrod, "Inflation and the excess taxation of capital gains on corporate stock," *National Tax Journal*, Vol. 31 (1978). p. 107.
- Feldstein Martin, Joel Slemrod, and Shlomo Yitzhaki, "The effects of taxation on the selling of corporate stock and the realization of capital gains: reply," *The Quarterly Journal of Economics*, Vol. 99 (February 1984). p. 111.
- Fieleke, Norman S., "National saving and international investment," Saving and Government Policy, Conference Series No. 25. Boston: Federal Reserve Bank of Boston (1982).
- Financial Accounting Standards Board, Statement of Financial Accounting Standards No. 96, Accounting for Income Taxes (1987).
- First Boston Corporation, New York, High Yield Handbook (various issues).
- Frankel, Jeffrey, "International capital mobility and crowding-out in the U.S. economy: imperfect integration of financial markets or of goods markets?" How Open is the U.S. Economy?, R. Hafer editor. Lexington: Lexington Books (1986). p. 33.
- Frankel, Jeffrey, "Quantifying international capital mobility in the 1980s," Current Issues in International Trade and International Finance, Dilip Das, editor. Oxford: Oxford University Press. (forthcoming).
- Frankel, Jeffrey and A. MacArthur, "Political vs. currency premia in international real interest differentials: a study of forward rates for 24 countries," *European Economic Review*, Vol. 32 (1988). p. 1083.
- Frankel, Jeffrey and Kenneth Froot, "Using survey data to test standard propositions regarding exchange rate expectations," *American Economic Review*, Vol. 77 (1987). p. 133.
- Freeman, Louis S., "Some Early Strategies for the methodical disincorporation of America after the Tax Reform Act of 1986: grafting partnerships onto C corporations, running amok with the master limited partnership concept, and generally endeavoring to defeat the intention of the draftsmen of the repeal of General Utilities," *Taxes*, Vol. 64 (1986). p. 962.
- Friedman, Benjamin J., "Views on the likelihood of financial crisis," Reducing the Risk of Financial Crisis, Martin Feldstein, editor. Chicago: University of Chicago Press (1990).
- French, Kenneth R. and James M. Poterba, "Investor diversification and international equity markets," Working Paper No. 3609. Cambridge: National Bureau of Economic Research (January 1991).

- Frenkel, J. and R. Levich, "Transaction costs and interest arbitrage: tranquil versus turbulent periods," *Journal of Political Economy*, Vol. 85 (1977). p. 1209.
- Froot, Kenneth and Jeffrey Frankel, "Forward discount bias: is it an exchange risk premium?" *Quarterly Journal of Economics*, Vol. 104 (1989). p. 139.
- Fullerton, Don, "Which effective tax rate?" *National Tax Journal*, Vol. 37 (March 1984). p. 23.
- Fullerton, Don, Robert Gillette, and James Mackie, "Investment incentives under the Tax Reform Act of 1986," Compendium of Tax Research 1987. Washington: U.S. Govt. Print. Off. (1987).
- Fullerton, Don and Roger H. Gordon, "A reexamination of tax distortions in general equilibrium models," Behavioral Simulation Methods in Tax Policy Analysis, Martin Feldstein, editor. Chicago: University of Chicago Press (1983).
- Fullerton, Don, Yolanda Henderson, and James Mackie, "Investment allocation and growth under the Tax Reform Act of 1986," Compendium of Tax Research 1987. Washington: U.S. Govt. Print. Off. (1987).
- Fullerton, Don and Yolanda Henderson, "A disaggregate equilibrium model of tax distortions among assets, sectors and industries," *International Economic Review*, Vol. 30 (May 1989). p. 391.
- Fullerton, Don, John B. Shoven, and John Whalley, "Replacing the U.S. income with a progressive consumption tax," *Journal of Public Economics*, Vol. 20 (1983). p. 3.
- Fullerton, Don, A. Thomas King, John B. Shoven, and John Whalley, "Corporate tax integration in the United States: a general equilibrium approach," *The American Economic Review*, Vol. 71 (September 1981). p. 677.
- Gaffrey, Dennis J. and James E. Wheeler, "The double taxation of corporate source income: reality or illusion?" *Tax Advisor*, Vol. 8 (1977). p. 523.
- Gale, William G. and John Karl Scholz, "IRAs and household saving," unpublished paper (1990).
- Galper, Harvey, Robert Lucke, and Eric Toder, "A general equilibrium analysis of tax reform," Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax, Henry J. Aaron, Harvey Galper and Joseph A. Pechman, editors. Washington: The Brookings Institution (1988).
- Gammie, Malcolm, "Corporate tax harmonisation: an 'ACE' proposal," *IBFD European Taxation*, Vol. 12 (1991). p. 545.
- Gertler, Mark and R. Glenn Hubbard, "Taxation, corporate capital structure, and financial distress," Tax Policy and the Economy 4, Lawrence Summers, editor. Cambridge: MIT Press (1990).
- Gertler, Mark and R. Glenn Hubbard, "Corporate financial policy, taxation, and macroeconomic risk." Unpublished paper (1991).
- Gertler, Mark and Kenneth Rogoff, "North-south lending and endogenous domestic capital market inefficiencies," *Journal of Monetary Economics*, Vol. 26 (1990). p. 245.
- Gilbert, Richard J. and David M. Newbery, "Entry, acquisition, and the value of shark repellent," Working Paper 8888, University of California, Berkeley, (August 1988).
- Gilson, Ronald J., Myron S. Scholes, and Mark A. Wolfson, "Taxation and the dynamics of corporate control: the uncertain case for tax motivated acquisitions," Working Paper No. 24, Stanford Law School (January 1986).
- Giovannini, Alberto, "Capital taxation: national tax systems versus the European capital market," *Economic Policy*, Vol. 4 (Oct. 1989). p. 345.
- Giovannini, Alberto and Philippe Jorion, "Interest rates and risk premia in the stock market and the foreign exchange market," *Journal of International Money and Finance*, Vol. 6 (1987). p. 107.
- Gordon, Roger H., "Uncertainty and the analysis of corporate tax distortions," Proceedings of the 74th Annual Conference. Columbus: National Tax Association-Tax Institute of America (1981).
- Gordon, Roger H., "An optimal taxation approach to fiscal federalism," *Quarterly Journal of Economics*, Vol. 98 (Nov. 1983). p. 567.
- Gordon, Roger H., "Taxation of investment and savings in world economy: the certainty case," *American Economic Review*, Vol. 76 (Dec. 1986). p. 1086.
- Gordon, Roger H. and Jeffrey MacKie-Mason, "Effects of the tax reform act of 1986 on corporate financial policy and organizational form," Do Taxes Matter? J. Slemrod, editor. Cambridge: MIT Press (1990).

- Gordon, Roger H. and Jeffrey K. MacKie-Mason, "Taxes and the choice of organizational form," Working Paper No. 3781. Cambridge: National Bureau of Economic Research (July 1991).
- Gordon, Roger H. and Burton Malkiel, "Corporation finance," How Taxes Affect Economic Behavior, Henry J. Aaron and Joseph A. Pechman, editors. Washington: The Brookings Institution (1981).
- Gourevitch, Harry G., "Corporate tax integration: the European experience," *Tax Lawyer*, Vol. 31 (1977). p. 65.
- Graetz, Michael J., "Legal transitions: the case of retroactivity in income tax revision," *University of Pennsylvania Law Review*, Vol. 47 (1977). p. 126.
- Graetz, Michael J., "Implementing a progressive consumption tax," *Harvard Law Review*, Vol. 92 (1979). p. 1575.
- Gravelle, Jane G., Effective Tax Rates in the Administration and Ways and Means Tax Proposal: Updated Tables, Congressional Research Service Report for Congress No. 85-1006E, Congressional Research Service, Washington, D.C. (1985).
- Gravelle, Jane G., Effective Corporate Tax Rates in the Major Revision Plans: A Comparison of the House, Senate, and Conference Committee Versions, Congressional Research Service Report for Congress No. 85-1099E, Congressional Research Service, Washington, D.C. (1986).
- Gravelle, Jane G., "Differential taxation of capital income: another look at the 1986 Tax Reform Act," *National Tax Journal*, Vol. 47(2) (December 1989). pp. 441.
- Gravelle, Jane G., Corporate Tax Integration: Issues and Options, Congressional Research Service, Washington, D.C. (1991).
- Gravelle, Jane G. and Laurence Kotlikoff, "The incidence and efficiency costs of corporate taxation when corporate and noncorporate firms produce the same good," *Journal of Political Economy*, Vol. 97 (Aug. 1989). p. 749.
- Griffith, Thomas D., "Integration of the corporate and personal income taxes and the AL1 proposal," *Santa Clara Law Review*, Vol. 23 (1983). p. 715.
- Goldsworth, John G., "Status report on harmonization of direct taxation," *Tax Notes International* (February 14, 1990). p. 15.
- Hall, Robert E., "Intertemporal substitution in consumption," *Journal of Political Economy*, Vol. 96 (April 1988). p. 339.
- Hall, Robert E. and Dale W. Jorgenson, "Tax policy and investment behavior," *American Economic Review*, Vol. 57 (June 1967). p. 391.
- Hall, Robert E. and Dale W. Jorgenson, "Application of the theory of optimal capital accumulation," Tax Incentives and Capital Spending, Gary Fromm, editor. Washington: The Brookings Institution (1971).
- Halperin, Daniel I., "Interest in disguise: taxing the time value of money," *Yale Law Journal*, Vol. 95 (1986). p. 506.
- Halperin, Daniel I. and C. Eugene Steuerle, "Indexing the tax system for inflation," Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax, Harvey Galper and Joseph A. Pechman, editors. Washington: The Brookings Institution (1988).
- Hammer, Richard M., "The taxation of income from corporate shareholders: review of present systems in Canada, France, Germany, Japan and the U.K.," *National Tax Journal*, Vol. 28 (1975). p. 315.
- Hansen, Lars and Robert Hodrick, "Risk averse speculation in the forward foreign exchange market," Exchange Rates and International Macroeconomics, Jacob Frenkel, editor. Chicago: University of Chicago Press (1983).
- Harberger, Arnold C., "The incidence of the corporation income tax," *Journal of Political Economy*, Vol. 70 (June 1962). p. 215.
- Harberger, Arnold C., "Efficiency effects of taxes on income from capital," Effects of the Corporation Tax, Marian Krzyzaniak, editor. Detroit: Wayne State University Press (1966).
- Harberger, Arnold C., "Vignettes on the world capital market," *American Economic Review*, Vol. 70 (1980). p. 331.
- Harberger, Arnold C., "The state of the corporate income tax: who pays? Should it be repealed?" New Directions in Federal Tax Policy for the 1980's, Charles E. Walker and Mark A. Bloomfield, editors. Cambridge: Ballinger Publishing Company (1983).

- Hatta, Tatsuo, "Welfare effects of changing commodity tax rates toward uniformity," *Journal of Public Economics*, Vol. 29 (February 1986). p. 99.
- Haugen, Robert A. and Lemma W. Senbet, "On the resolution of agency problems by complex financial instruments: a reply," *The Journal of Finance*, Vol. 42 (September 1987). pp. 1091.
- Henderson, Yolanda K., "The taxation of banks: particular privileges or objectionable burden?" *New England Economic Review* (May/June 1987). p. 3.
- Hervey, Richard J., Taxation of Regulated Investment Companies. Washington: Tax Management (1987).
- Hines, James and R. Glenn Hubbard, "Coming home to America: dividend repatriations by U.S. multinationals," Taxation in the Global Economy, Assaf Razin and Joel Slemrod, editors. Chicago: University of Chicago Press (1990).
- Hoffman, Arnold, "Pension funds and the economy, 1950-87," Trends in Pensions, Daniel Beller and John Turner, editors. Department of Labor (1989).
- Holland, Daniel M., "Some observations on full integration," *National Tax Journal*, Vol. 28 (1975). p. 353.
- Horst, Thomas, "A note on the optimal taxation of international investment income," *Quarterly Journal of Economics*, Vol. 44 (June 1980). p. 793.
- House of Representatives, Committee on Ways and Means, The President's 1978 Tax Reduction and Reform Proposals, 95th Cong., 2d Sess. (1978), pt. 6.
- House of Representatives, Committee on Ways and Means, Tax Reform Act of 1985: Report of the Committee on Ways and Means, House of Representatives, on H.R. 3838 Together With Dissenting and Additional Dissenting Views (Report No. 426), 99th Cong., 1st Sess. (December 7, 1985). pp. 234-242, 302-328.
- Howry, Phillip and Saul Hymans, "The measurement and determinants of loanable funds saving," What Should be Taxed: Income or Expenditure? Joseph A. Pechman, editor. Washington: The Brookings Institution (1978). p. 1.
- Hubbard, R. Glenn, "Do IRAs and Keoghs increase saving?" *National Tax Journal*, Vol. 37 (March 1984). p. 43.
- Hubbard, R. Glenn, "Tax corporate cash flow, not income," *The Wall Street Journal* (February 16, 1989).
- Hubbard, R. Glenn, "Introduction," Asymmetric Information, Corporate Finance, and Investment. R. Glenn Hubbard, editor. Chicago: University of Chicago Press (1990).
- Hubbard, R. Glenn and Kenneth L. Judd, "Liquidity constraints, fiscal policy, and consumption," *Brookings Papers on Economic Activity 1* (1986). p. 1.
- Hubbard, R. Glenn and Kenneth L. Judd, "Social security and individual welfare: precautionary saving, borrowing constraints, and the payroll tax," *American Economic Review*, Vol. 77 (September 1987). p. 630.
- Institute for Fiscal Studies, The Structure and Reform of Direct Taxation: The Report of a Committee Chaired by Professor J.E. Meade. London: George Allen and Unwin (1978).
- Institute for Fiscal Studies, Equity for Companies: A Corporation Tax for the 1990s. Fourth Report of the IFS Capital Taxes Group, Commentary No. 26. London: Institute for Fiscal Studies (1991).
- Investment Company Institute, Mutual Fund Fact Books (various editions).
- Jensen, Michael, "Agency costs of free cash flow, corporate finance, and takeovers," *American Economic Review*, Vol. 32 (1986). p. 323.
- John, Kose, "Risk-shifting incentives and signalling through corporate capital structure," *The Journal of Finance*, Vol. 42 (1987). p. 623.
- Jorgenson, Dale W., "Capital theory and investment behavior," *American Economic Review*, Vol. 53 (May 1983).
- Jorion, Phillipe and Eduardo Schwartz, "Integration vs. segmentation in the Canadian stock market," *The Journal of Finance*, Vol. 41 (1986). p. 603.
- King, Mervyn A., "Corporate taxation and dividend behavior: a comment," *Review of Economic Studies* (1971). p. 377.
- King, Mervyn A., "Corporate taxation and dividend behavior: a further comment," *Review of Economic Studies*, Vol. 39 (1972). p. 231.
- King, Mervyn A., Public Policy and the Corporation. London: Chapman and Hall (1977).

- King, Mervyn A., "The cash flow corporate income tax," The Effects of Taxes on Capital Accumulation, Martin Feldstein, editor. Chicago: University of Chicago Press (1987).
- Kitchen, Harry M., "Canada," Comparative Tax Systems: Europe, Canada and Japan, Joseph A. Pechman, editor. Arlington: Tax Analysts (1987).
- Konstas, Panos, "Bank and tax-exempt securities in the new tax environment," *Banking and Economic Review* (November/December 1986).
- Lakonishok, Josef and Baruch Lev, "Stock splits and stock dividends: why, who, and when," *The Journal of Finance*, Vol. 42 (September 1987). p. 913.
- Lamoureux, Christopher G. and Percy Poon, "The market reaction to stock splits," *The Journal of Finance*, Vol. 42 (December 1987). p. 1347.
- Lander, Joel, "Optimal taxation policies which affect capital structure," Law and Economics Workshop, UCLA Economics Dept. (May 12, 1989).
- Larum, J. "The taxation of superannuation in Australia," presented at the policy forum *Assessing the Implications of Proposals for Pension Fund Taxation*, Employee Benefits Research Institute--Education and Research Fund, Washington, D.C. (1990).
- Lee, William, "Corporate leverage and the consequences of macroeconomic instability," Studies in Financial Changes and the Transmission of Monetary Policy. New York: Federal Reserve Bank of New York: (May 1990).
- Leonard, Robert J., "A pragmatic view of corporate integration," *Tax Notes* (June 1, 1987). p. 889.
- Levmore, Saul, "The positive role of tax law in corporate and capital markets." *Journal of Corporate Law*, Vol. 12 (1987). p. 483.
- Lichtenberg, Frank R. and Donald Siegel, "The effects of leveraged buyouts on productivity and related aspects of firm behavior," Working Paper No. 3022, Cambridge: National Bureau of Economic Research (June 1989).
- Lintner, John V., "The distribution of incomes of corporations among dividends, retained earnings, and taxes," *American Economic Review*, Vol. 46 (May 1956). p. 97.
- Litzenberger, Robert H. and James C. Van Horne, "Elimination of the double taxation of dividends and corporate financial policy," *The Journal of Finance*, Vol. 33 (June 1978). p. 737.
- Lodin, Sven-Olof, The Swedish Tax Reform of 1991 - An Overview, Stockholm: Federation of Swedish Industries (1990).
- Long, Michael S. and Ileen B. Malitz, "Investment patterns and financial leverage," Corporate Capital Structures in the United States, Benjamin Friedman, editor. Chicago: University of Chicago Press (1985).
- Mackie, James B., "Real and financial distortions of the corporate income tax," mimeo, Office of Tax Analysis, U.S. Treasury (1991, forthcoming).
- MacKie-Mason, Jeffrey, "Do taxes affect corporate financing decisions?" *The Journal of Finance*, Vol. 45 (December 1990). p. 1471.
- MacKie-Mason, Jeffrey K., "Do firms care who provides their financing," Asymmetric Information, Corporate Finance, and Investment, R. Glenn Hubbard, editor. Chicago: University of Chicago Press (1990).
- Mark, Nelson, "Some evidence on the international equality of real interest rates," *Journal of International Money and Finance*, Vol. 4, (1985). p. 189.
- Marsh, Paul, "The choice between equity and debt: an empirical study," *The Journal of Finance*, Vol. 37 (March 1982). p. 121.
- Masulis, Ronald W., "Impact of capital structure changes on firm value: some estimates," *The Journal of Finance*, Vol. 38 (March 1983). p. 107.
- Maule, James Edward, "The effect of federal income tax integration on state tax systems," *Tax Notes* (July 12, 1982). p. 99.
- Mayer, Colin, "Corporation tax, finance and the cost of capital," *Review of Economic Studies*, Vol. 153 (1986). p. 93.
- McIntyre, Michael J., "Pensees on integration: where's the reform?" *Tax Notes* (Sept. 5, 1977). p. 11.

- McLure, Charles E., Jr., "Integration of the personal and corporate income taxes: the missing element in recent tax reform proposals," *Harvard Law Review*, Vol. 88 (1975). p. 532.
- McLure, Charles E., Jr., "The case for integrating the income taxes," *National Tax Journal*, Vol. 28 (September 1975). p. 255.
- McLure, Charles E., Jr., "Integration of the income taxes: why and how," *Journal of Corporate Taxation*, Vol. 2 (1976). p. 458.
- McLure, Charles E., Jr., "Integrating the income taxes: how to do it right," *Tax Notes* (September 5, 1977). p. 3.
- McLure, Charles E., Jr., "A status report on tax integration in the United States," *National Tax Journal*, Vol. 31 (1978). p. 313.
- McLure, Charles E., Jr., Must Corporate Income Be Taxed Twice? Washington: The Brookings Institution (1979).
- McLure, Charles E., Jr., "International aspects of dividend relief," *Journal of Corporate Taxation*, Vol. 7 (Summer 1980). p. 137.
- McLure, Charles E., Jr. and Stanley S. Surrey, "Integration of income taxes--issues for debate," *Harvard Business Review*, Vol. 55 (September-October 1977). p. 169.
- McNulty, John K., "Integrating the corporate income tax," *American Journal of Comparative Law*, Vol. 31 (1983). p. 661.
- Mieszkowski, Peter, "Tax incidence theory: the effects of taxes on the distribution of income," *Journal of Economic Literature*, Vol. 7 (December 1969). p. 1103.
- Miller, Merton H. and Kevin Rock, "Dividend policy under asymmetric information," *The Journal of Finance*, Vol. 40 (September 1985). p. 103.
- Miller, Merton H. and Myron S. Scholes, "Dividends and taxes," *Journal of Financial Economics*, Vol. 7 (August 1979). p. 433.
- Minarik, Joseph J., "The effects of taxation on the selling of corporate stock and the realization of capital gains: Comment," *Quarterly Journal of Economics*, Vol. 99, No. 1 (February 1984). p. 93.
- Mishkin, Frederic S., "Are real interest rates equal across countries? An empirical investigation of international parity conditions," *The Journal of Finance*, Vol. 39 (1984a). p. 1345.
- Mishkin, Frederic S., "The real interest rate: a multi-country empirical study," *Canadian Journal of Economics*, Vol. 17 (1984b). p. 283.
- Moody's Bond Survey*, (various editions). Published by Moody's Investors Service, New York.
- Mundstock, George, "The mistaxation of rent: eliminating the lease/loan distinction," *Tax Notes* (October 21, 1991). p. 353.
- Murphy, R., "Capital mobility and the relationship between saving and investment in OECD countries," *Journal of International Money and Finance*, Vol. 3 (1984). p. 327.
- Murthy, N.R.Vasudeva, "The effects of taxes and rates of return on foreign direct investment in the United States: some econometric comments," *National Tax Journal*, Vol. 42 (June 1989). p. 205.
- Musgrave, Peggy B., United States Taxation of Foreign Investment Income: Issues and Arguments, Cambridge: International Tax Program, Harvard Law School (1969).
- Musgrave, Richard A. and Peggy B. Musgrave, Public Finance in Theory and Practice. New York: McGraw Hill Inc. (1984). p. 268.
- Mutti, John and Harry Grubert, "The taxation of capital income in an open economy: the importance of resident-nonresident tax treatment," *Journal of Public Economics*, Vol. 27 (1985). p. 291.
- Myers, Stewart C., "The capital structure puzzle," *The Journal of Finance*, Vol. 39 (July 1984). p. 575.
- Nadeau, Serge, "A model to measure the effects of taxes on the real and financial decisions of the firm," *National Tax Journal*, Vol. 41 (December 1988). p. 467.
- Nagle, F. R., "Scrivener and Brittan urge progress on indirect tax harmonization during U.S. visits," *Tax Notes International* (June 10, 1990). p. 322.

- Narayanan, M. P., "On the resolution of agency problems by complex financial instruments: a comment," *The Journal of Finance*, Vol. 42 (September 1987). p. 1083.
- Neese, Beth, "Thriffs and taxes: a never-ending battle (or does it only seem that way?)," *Bottomline*, Vol. 5 (November 1988). p. 45.
- Neubig, Thomas S., "The taxation of financial institutions after deregulation," *National Tax Journal*, Vol. 37 (September 1984). p. 351.
- Neubig, Thomas S. and Martin A. Sullivan, "The effect of the Tax Reform Act of 1986 on commercial banks," Compendium of Tax Research 1987, Department of the Treasury, Washington: U.S. Govt. Print. Off. (1987).
- New York State Bar Association, Tax Section, Committee on Corporations, "Report on the integration of the corporate and individual income taxes," *Tax Lawyer*, Vol. 31 (1977). p. 37.
- Nolan, John S., "Integration of the corporate and individual income taxes," *1978 University of Southern California Tax Institute* (1978). p. 899.
- Obstfeld, Maurice, "Capital mobility in the world economy: theory and measurement," *Carnegie-Rochester Conference Series on Public Policy*, Vol. 31 (1986).
- Obstfeld, Maurice, "How integrated are world capital markets? Some New Tests," Working Paper No. 2075 (1986).
- Organisation for Economic Co-operation and Development, National Accounts, Detailed Tables, Volume II, 1976 - 1988.
- Organisation for Economic Co-operation and Development, Revenue Statistics of OECD Member Countries, 1965-1990. Paris (1991). p. 78.
- Ofer, Aharon R. and Anjan V. Thakor, "A theory of stock price responses to alternative corporate cash disbursement methods: stock repurchases and dividends," *The Journal of Finance*, Vol. 42 (June 1987). p. 365.
- Ofer, Aharon R. and Daniel R. Siegel, "Corporate financial policy, information, and market expectations: an empirical investigation of dividends." *The Journal of Finance*, Vol. 42 (September 1987). p. 889.
- Parker, James E., "Evaluating proposals for eliminating double taxation in the U.S.," *Tax Executive*, Vol. 30 (April 1978). p. 210.
- Pechman, Joseph A. and Benjamin A. Okner, Who Bears the Tax Burden? Washington: The Brookings Institution (1974).
- Pechman, Joseph A., Who Paid the Taxes?, 1966-85. Washington: The Brookings Institution (1985).
- Pechman, Joseph A., Federal Tax Policy, 5th edition. Washington: The Brookings Institution (1987).
- Pechman, Joseph A., "Tax reform: theory and practice," *Journal of Economic Perspectives* Vol. 1 (Summer 1987). p. 11.
- Peel, Fred W., "A proposal for eliminating double taxation of corporate dividends," *Tax Lawyer*, Vol. 39 (1985). p. 1.
- Penati, A. and M. Dooley, "Current account imbalances and capital formation in industrial countries, 1949-1981," *International Monetary Fund Staff Papers*, Vol. 31 (1984) p. 1.
- Platt, Joseph S., "Integration and correlation--the Treasury proposal," *Tax Law Review*, Vol. 3 (1947). p. 59.
- Polito, Anthony P., "A proposal for an integrated income tax," *Harvard Journal of Law and Public Policy*, Vol. 12 (1989). p. 1009.
- Popper, H., "The term structure of interest rates in the onshore markets of the United States, Germany, and Japan," *International Finance Discussion Papers No. 382*, Washington: Federal Reserve Board (1990).
- Poterba, James M., "How burdensome are capital gains taxes: evidence from the United States?" *Journal of Public Economics*, Vol. 33 (July 1987). p. 157.
- Poterba, James M., "Tax policy and corporate saving," *Brookings Papers on Economic Activity* 2 (1987). p. 455.
- Poterba, James M. and Lawrence Summers, "The economic effects of dividend taxes," Recent Advances in Corporate Finance, Edward Altman and Marti Subrahmanyam, editors. Homewood: Richard D. Irwin (1985).
- Rangazas, Peter and Dewan Abdullah, "Taxes and the corporate sector debt ratio: some time series evidence," *Review of Economics and Statistics*, Vol. 69 (1987). p. 357.
- Richardson, R. (New Zealand Minister of Finance), and W. Creech (New Zealand Minister of Revenue), Taxing Income Across International Borders: A Policy Framework (July 30, 1991).

- Richardson, R. (New Zealand Minister of Finance), and W. Creech (New Zealand Minister of Revenue), Taxation Policy: Business Tax Policy 1991 (July 30, 1991).
- Roach, Stephen, "Living with corporate debt," *Morgan Stanley Essay* (November 1988).
- Royal Commission on Taxation, Report of the Royal Canadian Commission on Taxation, Vol. 4, Chapter 19. Ottawa: Queen's Printer (1966).
- Rudnick, Rebecca S., "Who should pay the corporate tax in a flat tax world?" 39 *Case Western Reserve Law Review*, Vol. 39 (1988-89). p. 965.
- Sato, Mitsuo, and R. Bird, "International aspects of the taxation of corporations and shareholders," *International Monetary Fund Staff Paper*, Vol. 22 (1975). p. 384.
- Schaffer, Daniel C., "The income tax on intercorporate dividends," *Tax Lawyer*, Vol. 33 (Fall, 1979). p. 161.
- Seidel, Jeffrey B. and Joseph V. Zolofra, "Banks are increasingly offering their clients advice on mutual funds and may soon be able to sell the vehicles widely," *Bankers Monthly*, Vol. 105 (1988). p. 109.
- Seidman, L. William, "Integration of corporate and individual income tax system," remarks to AICPA Tax Committee (March 22, 1990).
- Senate, Committee on Finance, Tax Reform Act of 1986: Report of the Committee on Finance, United States Senate, to Accompany H.R. 3838, together with Additional Views, (Report No. 313), 99th Cong., 2nd Sess. (May 29, 1986).
- Shakow, "Taxation without realization: a proposal for accrual taxation," *University of Pennsylvania Law Reviews*, Vol. 134 (1986). p. 1111.
- Shefrin, Hersh M. and Meir Statman, "Explaining investor preference for cash dividends," *Journal of Financial Economics*, Vol. 13 (June 1984). p. 253.
- Sheppard, Lee A., "Corporate tax integration, the proper way to eliminate the corporate tax," *Tax Notes* (May 6, 1985). p. 637.
- Shleifer, Andrei and Robert W. Vishny, "Large shareholder and corporate control," *Journal of Political Economy*, Vol. 94 (June 1986). p. 461.
- Shoven, John B. and John Whalley, "A general equilibrium calculation of the effects of differential taxation of income from capital in the U.S.," *Journal of Public Economics*, Vol. 1 (1972). p. 281.
- Shoven, John B., "The incidence and efficiency effects of taxes on income from capital," *Journal of Political Economy*, Vol. 84 (December 1976). p. 1261.
- Shoven, John B., "The tax consequences of share repurchases and other non-dividend cash payments to equity owners," Tax Policy and the Economy, Vol. 1, Lawrence Summers, editor. Cambridge: The MIT Press (1987).
- Shoven, John B. and John Whalley, "Applied general equilibrium models of taxation and international trade: introduction and survey," *Journal of Economic Literature*, Vol. 22 (September 1984). p. 1001.
- Simon, William E., "Testimony," Tax Reform, Hearings before Committee on Ways and Means, House of Representatives, 94th Cong., 1st Sess. (1975), pt. 5, p. 3846.
- Sinai, Allen, Andrew Lin, and Russell Robins, "Taxes, saving, and investment: some empirical evidence," *National Tax Journal*, Vol. 36 (1983). p. 321.
- Smith, Dan Throop, "Relief from double taxation of dividend income," *Harvard Business Review*, Vol. 55 (January-February 1977). p. 87.
- Smith, Janet Kiholm, "Trade credit and informational asymmetry," *The Journal of Finance*, Vol. 42 (September 1987). p. 863.
- Staff of the Joint Committee on Taxation, Tax Reform Proposals: Corporate Taxation, (JCS-40-85) 99th Cong., 1st Sess. (September 19, 1985).
- Staff of the Joint Committee on Taxation, Federal Income Tax Aspects of Corporate Financial Structures, (JCS-1-89) 101st Cong., 1st Sess. (January 18, 1989), p. 92.
- Staff of the Joint Committee on Taxation, Tax Policy and Capital Formation 95th Cong., 1st Sess., (JCS-14-77), (1977).

- Staff of the Joint Committee on Taxation, Factors Affecting the International Competitiveness of the United States, (JCS-6-91), 102nd Cong., 1st Sess. (May 30, 1991).
- Staff of the Senate Finance Committee, The Reform and Simplification of the Income Taxation of Corporations, (S.Prt. 98-95) 98th Cong., 1st Sess. (1983).
- Staff of the Senate Finance Committee, The Subchapter C Revision Act of 1985: A Final Report Prepared by the Staff of the Senate Finance Committee, (Report 99-47), 99th Cong., 1st Sess. 45 (1985).
- Stehle, R., "An empirical test of the alternative hypotheses of national and international pricing of risky assets," *The Journal of Finance*, Vol. 32 (1977). p. 493.
- Steuerle, C. Eugene, "A simplified integrated tax," *Tax Notes* (July 17, 1989). p. 335.
- Stiglitz, Joseph, "Taxation, corporate financial policy, and the cost of capital," *Journal Public Economics*, Vol. 2 (1973). p. 1.
- Strongin, Steven, "Credit flows and the credit crunch," Chicago Fed Letter. Chicago: Federal Reserve Bank of Chicago (November 1991).
- Summers, Lawrence H., "Taxation and corporate investment: a q-theory approach," *Brookings Papers on Economic Activity* 1 (1981). p. 67.
- Summers, Lawrence H., "Tax policy and international competitiveness," Working Paper No. 2007. Cambridge: National Bureau of Economic Research (1986).
- Surrey, Stanley S., Pathways to Tax Reform: the Concept of Tax Expenditures. Cambridge: Harvard University Press (1973).
- Surrey, Stanley S., "Reflections on 'integration' of corporate and individual taxes," *National Tax Journal*, Vol. 28 (September 1975). p. 335.
- Swedish Ministry of Finance, The Swedish Tax Reform of 1991 (April 1991).
- Taylor, Willard B., "Report on the integration of corporate and individual income taxes," *Tax Lawyer*, Vol. 31 (1977). p. 37.
- Tehrani, Hasan, Nickolaos G. Travlos, and James F. Waagelein, "The effect of long-term performance plans on corporate sell-off-induced abnormal returns," *The Journal of Finance*, Vol. 42 (September 1987). p. 933.
- Thuronyi, Victor, "The taxation of corporate income -- a proposal for reform," *American Journal of Tax Policy*, Vol. 2 (1983). p. 109.
- Travlos, Nickolaos G., "Corporate takeover bids, methods of payment and bidding firms' stock returns," *The Journal of Finance*, Vol. 42 (September 1987). p. 943.
- Turro, John, "The demise of the unified European Community withholding tax," *Tax Notes International* (August 9, 1989). p. 3.
- U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.
- U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business. U.S. Govt. Print. Off. (various issues).
- U.S. Department of the Treasury, Blueprints for Basic Tax Reform, U.S. Govt. Print. Off. (1977).
- U.S. Department of the Treasury, Tax Reform Options Papers (1977).
- U.S. Department of the Treasury, Tax Reform for Fairness, Simplicity, and Economic Growth; The Treasury Department Report to the President, U.S. Govt. Print. Off. (1984).
- U.S. Department of the Treasury, Report to the Congress on Life Insurance Company Taxation (August 1989).
- U.S. Department of the Treasury, Report to the Congress on Taxation of Life Insurance Company Products (1990).
- U.S. Department of the Treasury, Widely Held Partnerships: Compliance and Administrative Issues (1990).
- U.S. Department of the Treasury, Report to the Congress on Property and Casualty Insurance Company Taxation (1991).
- Vann, R., Trans-Tasman Taxation of Equity Investment. Wellington: Victoria University Press for the Institute of Policy Studies (1989).

- Venti, Steven F. and David A. Wise, "Tax-deferred accounts, constrained choice, and estimation of individual saving," *Review of Economic Studies*, Vol. 53 (1986). p. 579.
- Warren, Alvin C., "Fairness and a consumption-type or cash flow personal income tax," *Harvard Law Review*, Vol. 88 (1975). p. 931.
- Warren, Alvin C., Jr., "The relation and integration of individual and corporate income taxes," *Harvard Law Review*, Vol. 94 (1981). p. 719.
- Warren, Alvin C., Jr., "Corporate integration proposals and ACRS," *San Diego Law Review*, Vol. 22 (1985). p. 325.
- Warshawsky, Mark, "Is there a corporate debt crisis? Another look," Financial Markets and Financial Crises, R. Glenn Hubbard, editor. Chicago: University of Chicago Press (1991).
- Weiss, Randall D. "Effective corporation income tax rates," *National Tax Journal*, Vol. 32 (September 1979). p. 380.
- The White House, The President's Tax Proposals to the Congress for Fairness, Growth, and Simplicity, U.S. Govt. Print. Off. (1985). p. 12.
- Wiesenberger Financial Services, Investment Companies Service, 1989. New York: Warren, Gorham, and Lamont. p. 10.
- Williamson, Oliver E., "Mergers, acquisitions, and leveraged buyouts: an efficiency assessment," Working Paper No. 60, Yale University Center for Studies in Law, Economics and Public Policy, Program in Law and Organization (January 1987).
- Young, Kan H., "The effects of taxes and rates of return on foreign direct investment in the United States," *National Tax Journal*, Vol. 41 (March 1988). p. 109.
- Zolt, Eric M., "Corporate taxation after the Tax Reform Act of 1986: a state of disequilibrium," *North Carolina Law Review*, Vol. 66 (June 1988). p. 839.

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